ONENET
one network for Europe

Open Call for Third Parties

Guide for Applicants
v1.10

Table of contents

Document revision history

Version	Date	Modifications introduced	
		Reason	Page No
V1.10	08/12/2021	Eligibility clarification	11
V1.20	23/01/2022	Typo	19

Definitions

OneNet

One Network for Europe - OneNet is a H2020 36-month Research and Innovation action. OneNet project is funded by the European Union and the Horizon 2020 programme, under Grant Agreement no 957739.

Cascade funding

Cascade funding or also known as Financial Support for Third Parties is a European Commission mechanism to distribute public funding in order to assist beneficiaries.

This funding method aims at simplifying the administrative procedures, creating a light application scheme, by allowing that some EU-funded projects may issue, in turn, open calls for further funding. This scheme was first introduced by the European Commission in Horizon 2020, the Framework Program for Research and Innovation (2014-2020). European Commission expects from OneNet project to "make use of financial support to third parties for at least 2.5% of the EU contribution to the project for the incorporation of developers (SMEs and start-ups) of innovative energy services (in particular for household consumers)."

Third Parties

Other legal entities which participate in Horizon 2020 by carrying out some tasks in an action, but which do not sign the Grant Agreement (including entities linked to the beneficiaries) are considered as "third parties involved in an action" (Article 8 of the General Model GA - multi-beneficiary). They are not bound by the terms and conditions of the Grant Agreement and consequently, the European Union (represented by the Commission or another funding body) has no obligation vis-à-vis third parties. If necessary to implement the action, beneficiaries may use contracts and sub-contracting for the purchase of goods, works or services, in-kind contributions provided by third parties and also linked third parties carrying out tasks under an action.

Cascade funding partner

The OneNet partner responsible for the cascade funding grant.

Support team

A project body, composed of certain partners that are connected to the Open Call.

Mentoring Team

A project body, composed of partners connected to the Scenarios that support selected Third Parties during the development phase.

SMEs

Entities having up less than 250 employees and up to an annual turnover of 50 million € or up to a balance sheet total of 43 million €. Small and medium-sized enterprises (SMEs) are defined in the EU recommendation 2003/361. (https://ec.europa.eu/growth/smes/sme-definition_en)

Start-up

A startup is an independent, organisation, which is younger than five years and is aimed at creating, improving and expanding a scalable, innovative, technology-enabled product with high and rapid growth. Detailed definition of a start-up is sited on the following link: https://europeanstartupnetwork.eu/vision/

Contract Funding Agreement

A legal contract signed between the Cascade funding partner and the Third Parties selected to be funded. The Contract Funding Agreement regulates (i) the conditions of transfer and usage of the cascade funding, (ii) the IPR rules, and (iii) the other collaboration mechanisms. More information can be found in Section 6.5 of this Guide (Contract Funding Agreements process).

GIS Geographic Information system Power System simulations and analysis
Spatial query Spatial query refers to the process of retrieving a data subset from a map layer by working directly with the map features

1. About OneNet Open Call

This document outlines the main aspects of the OneNet Open Call for Third Parties under the OneNet project that will be launched on 01 December 2021 with a deadline of 01 February 2022 at 17:00h CET (Brussels time).

It provides additional information for the submission of proposals and the evaluation procedure in the framework of the OneNet project. It complements the *Open Call Announcement* and the *Proposal Template* documents and their annexes. This document serves as a helpful guide and does not supersede the *Open Call Announcement* and *Contract Funding Agreement* documents.

One Network for Europe – OneNet is a project funded by the European Union's Horizon 2020 Research and Innovation Programme LC-SC3-ES-5-2018-2020 - TSO – DSO – Consumer: Large-scale demonstrations of innovative grid services through demand response, storage and small-scale (RES) generation under Grant Agreement N° 957739.

OneNet project envisions a European electricity system that provides for the seamless near real time integration of all actors across countries, with a view to create the conditions for a synergistic operation of market and network that optimizes the overall energy management while creating an open and fair market structure and maximizing the consumer capabilities to participate in it.

Involving an unprecedented number of countries in a single project, OneNet aims at creating the conditions for a new generation of grid services able to fully exploit demand response, storage and distributed generation while creating fair, transparent and open conditions for the consumer. As result, while creating One Network for Europe, the project aims to build a customer centric approach to grid operation.

This ambitious view is achieved by proposing new markets, products and services and by creating a unique IT architecture to support innovative mechanisms of platform federation. The project also aims at creating wide consensus on the solution by launching a variety of initiatives including a large-scale forum for discussion within the international energy community. The complete concept is also proven in 4 cluster demos. The OneNet project started on 1st of October 2020 and has a duration of 36 months.

The OneNet Consortium is coordinated by FRAUNHOFER GESELLSCHAFT ZUR FOERDERUNG DER ANGEWANDTEN FORSCHUNG E.V. (Fraunhofer) and composed of 72 project partners from 23 European countries.

With this Open Call, OneNet is looking for applicants that will introduce new services for the network operators and the household consumers by adopting the OneNet infrastructure and framework. To achieve the fulfilment of the scenarios below, which aim to enhance the current work of both real demonstration efforts and tools to elevate the OneNet overall framework, OneNet Open Call will distribute up to 550.000 euros among up to 9 Third Parties.

Applicants are asked to submit proposals under one of the following seven scenarios published though OneNet Open Call with the initiative to promote the development of new tools, services and activities.

The scenarios that the proposals shall address are:

1. Deep power system analysis through GIS server application (Georeferenced power system modeling and analysis utilizing the geo-server) _ Greek Demo
2. Active participation of an actual prosumer to the Cyprus demo and its coordination by the ABCM-D platform
3. DSO-TSO interaction _ Portuguese Demo
4. Flexibility Provider engagement to test local markets able to alleviate network congestions at medium and low voltage network levels _ Spanish Demo
5. Flexibility resources to provide flexibility services to the Northern Demonstrator
6. Advanced Data Quality Analysis of Data Exchange Platforms
7. Third Party providing access to the Polish Balancing Market for prequalified Flexibility Service Providers

Selected applicants will be given a 6-month period (maximum) to develop their proposal with the support of the Open Call Mentoring Team.

More information available: https://opencall-onenet.cintechsolutions.eu
Open Call Helpdesk: onenet_opencall@cintechsolutions.eu

2. OneNet Technical Description and Scope

One Network for Europe – OneNet project aims at creating a seamless integration of all actors in the electricity network across countries, by proposing mechanisms for TSOs and DSOs to work in a coordinated manner to unlock and enable the establishment of new flexibility markets and mechanisms.

To accomplish this objective, OneNet is developing an open, decentralised, flexible, scalable, and interoperable architecture to transform the actual European electricity system, often country fragmented, into a pan-European one. This architecture will provide the necessary tools and mechanisms for allowing open, technological agnostic, adaptable platform interconnections, ranging from a country level to a European level context. Within this effort, the design of an open architecture, data exchange and interoperability mechanisms, cybersecurity guidelines, and sets of AI and big data tools are being seamless aggregated.

Several demonstration activities will participate in the validation of the developed architecture, by defining and undertaking data exchange activities between intra and cross-country entities such as Aggregators, DSOs, TSOs, FSPs and service providers. Detailed information on OneNet project and public deliverables are available on the official OneNet website: https://onenet-project.eu/

2.1. Open Call Scenarios

OneNet project makes use of the cascade funding mechanism that offers financial support to Third Parties *for the incorporation of developers (SMEs and start-ups) of innovative energy services (in particular for household consumers)*. To achieve this goal, applicants are asked to address one of the seven scenarios described below.

2.1.1. No 1. : Deep power system analysis through GIS server application (Georeferenced power system modeling and analysis utilizing the geo-server) _ Greek Demo

Services include: Georeferenced deep/vertical grid modeling for TSO, DSO and micro grid voltage levels using the GIS technology and geo server, for the regions of Crete Island and Peloponnese in Greece. GIS (Geo) server installation and deployment. Systems will be modelled to the lowest level entity, DSO MV/LV substation (e.g. 10/0.4 kV) or a commercial/industrial/residential building possessing its own MV/LV substation. Georeferenced model should be further used for power system analysis on the selected region (Crete Island and Peloponnese) including both TSO and DSO grid simulation models that will be available. Power system analysis shall be performed jointly with the Work Package partners using an open source tools that are available. Services should also include assistance with the development of the geographic visualization of simulation results, exposing results and linking to other services being developed under f-channel via GIS technologies.

Please advise Annex 1 for the complete description of Scenario No 1.

2.1.2. No 2. : Active participation of an actual prosumer to the Cyprus demo and its coordination by the ABCM-D platform

The Cyprus demo of the OneNet project aims to demonstrate an effective collaboration between the different entities of the Cyprus power system namely the TSO, DSO, Market Operator, and prosumer/aggregator. In this context, the integration of an actual consumer in the demonstration framework will have an added value not only to the Cyprus demo but also to the OneNet project results. Thus, the potential applicants for this scenario, must develop a prosumer-level energy

management solution with API to facilitate the secure interconnection between the Active Balancing Congestion Management platform (of the distribution grid) that will be developed in the OneNet Cyprus demo and the prosumer. The applicants must have at their disposal a prosumer that will be based on Cyprus, meets the technical specification of the call and is willing to participate in the demonstration of the solutions proposed in the Cyprus demo.

Please advise Annex 2 for the complete description of Scenario No 2.

2.1.3. No 3. : DSO-TSO interaction _ Portuguese Demo

The increase in generation from renewable resources, with its uncertainty, and the increase in the use of electricity (due to EVs for example) means that system operators have to improve their strategies for managing the grid more efficiently in order to avoid unnecessary investments. In this scenario, our strategy is to optimize coordination between DSO and TSO by identifying and sharing the information that enables better operational planning for their networks. In order to share the information, a set of APIs and related services (potential links with existing systems, backend servers and databases) to enable a streamlined automated communication between system operators, namely the Portuguese DSO and TSO, need to be implemented.

For the longterm planning, will be defined the information that needs to be exchanged bidirectionally regarding the expected evolution of the transmission and distribution grids and their associated supply, consumption, production and flexibility services configuration.

Concerning the medium term, the effort will be focused on the definition of the information regarding the capacity and availability for load connection in the EHV/HV substation, as well as the information regarding the load transfers availability between EHV/HV interconnecting points, providing a better management of the distribution network loops by the DSO. This allows, in case of emergency, the possibility of the DSO to manage the transfer of load between networks.

For the efficient use of the flexibility services and enhancement of the operational planning, the increase of the information exchanged on short-term is key. Once well-defined the observability area of both operators around the TSO-DSO border, the focus will be in the definition of information to exchange about:

- Short-circuit power at the TSO-DSO border
- Scheduled maintenance actions in the observability area
- Aggregated consumption and production forecast by technology (solar, wind, hydro, etc)

Please advise Annex 3 for the complete description of Scenario No 3.

2.1.4. No 4. : Flexibility Provider engagement to test local markets able to alleviate network congestions at medium and low voltage network levels _ Spanish Demo

This scenario aims to involve in the Spanish Demo some Flexibility Service Providers that offer different type of flexibility resources in order to test new local markets able to alleviate network congestions at medium and low voltage distribution network level.

A Flexibility Service Provider (FSP) is either an aggregator, providing flexibility services, or the owner or the representative of large-scale or small-scale assets, which are connected to the distribution network and which can provide flexibility services to DSOs.

The FSP will have to develop the appropriate communication and interaction tools with resources and DSO and/or MO specific platforms.

FSPs participating should have resources connected to medium or low voltage levels at DSOs networks participating in Spanish demo in the indicated locations in Madrid and Murcia.

Recipients are requested to demonstrate clearly in their expressions of interest that they are aware of the areas in which their specific services fit best the project goals and the ongoing developments.

Potential aggregators must attach documentation evidencing commitment of resources from the FSPs that they represent.

The minimum required flexibility capacity to participate is 0.1MW.

Please advise Annex 4 for the complete description of Scenario No 4.

2.1.5. No 5. : Flexibility resources to provide flexibility services to the Northern Demonstrator

Northern Cluster (Finland, Estonia, Lithuania, Latvia) is looking for flexibility resources to connect the OneNet demonstration framework and provide new grid services for system operators. Flexibility provider (FP) should develop capabilities to steer distributed energy resources, register the resources in OneNet system, place bids and participate some flexibility market and provide validation data of the performed control actions.

System operators have new needs for flexibility in the future and OneNet project is developing tools to facilitate the needs. SO's are also looking for new type of service providers. For FP this enables new possibilities and business potential for market participation.

Please advise Annex 5 for the complete description of Scenario No 5.

2.1.6. No 6. : Advanced Data Quality Analysis of Data Exchange Platforms

This scenario aims to encourage the development of tools and services for data quality checks from a general perspective that will be flexible enough to adapt to the different needs of data exchanges among TSOs, DSOs and consumers. Considering the rich content of the ENTSO-E Transparency Platform (TP), the applicants are expected to demonstrate developed methodologies utilizing the TP data. The scenario requires expertise in the fields of Big Data Analytics, Machine Learning and advanced AI methodologies to perform data quality measurements in the energy domain. The expected services and tools for data quality measurements will ensure that the exchanged data among players has high quality standards. The applicants will have the chance to be part of the growing collaboration among TSOs-DSOs-Consumers by providing data services. The applicants will also achieve a good knowledge of the developing concepts and infrastructures in that field to better address their services with the growing market needs.

Please advise Annex 6 for the complete description of Scenario No 6.

2.1.7. No 7. : Third Party providing access to the Polish Balancing Market for prequalified Flexibility Service Providers.

In order to effectively conduct a demonstration in the Polish East Cluster demonstrator, in the scope of providing balancing services to the TSO on the existing Balancing Market by resources

located in the Medium Voltage and Low Voltage grid, it is necessary to represent such prequalified resources on the Balancing Market by an active Balancing Market Participant.

Successful applicant will became Balancing Market Participant representing prequalified resources on Balancing Market. Balancing Market Participant will submit offers for balancing capacity and / or balancing energy to the existing Balancing Market. If the offer is selected, activated and executed relevant remuneration according to existing rules will be paid. Chosen Balancing Market Participant will have an opportunity to test new solutions and explore the potential of a new customer segment.

Please advise Annex 7 for the complete description of Scenario No 7.

2.2. OneNet Open Call initiative

OneNet Open Call will distribute up to 550.000 EUR among up to 9 Third Parties with the initiative to bring new application experiments which address end users, by taking up and validating the results gained in the first phase of OneNet. The selected Third Parties will contribute to the impact of OneNet project in the energy ecosystem and the generalisation and validation of OneNet framework.

2.3. Third Parties' Benefit from the OneNet Open Call

The selected Third Parties with their participation in this Open Call will have the opportunity to:

- receive technical support and feedback on the proposed solution from the OneNet Consortium and its expert
- get in direct exchange with the responsible system operators, policy makers, market actors and technology providers in order to fulfill the requirements of the specific scenarios
- shape and impact OneNet's results, especially in the field of Business Use Case, consumer engagement and flexibility activation
- be a part of the largest European project in the field of TSO-DSO-Consumer coordination

The maximum amount of financial support is 60 000 EUR per third party.

3. Eligibility Criteria

In order to be considered eligible, applicants will have to abide to the requirements described in this chapter. The proposals that do not comply with the criteria enlisted will be excluded and marked as ineligible. The eligibility criteria will be checked during the whole evaluation process.

3.1. Eligible for Financial Support

Financial support will be provided to SMEs and Start-ups legally established in an EU Member State or in an Associated Country (as stated in Article 7 of the Horizon2020 Regulation). The legal entity is required to possess a validated Participant Identification Code (this code is provided for interested parties to participate in EU funding programmes and procurements). However, at the moment of submission, the entity can apply with the provisional PIC. Please advise the definitions of SMEs and Start-ups on pp.04 of this document.

Only single legal entities can apply for funding. Consortia are not eligible.

List of countries eligible for receiving H2020 funding grants:
https://ec.europa.eu/research/participants/data/ref/h2020/other/wp/2016-2017/annexes/h2020-wp1617-annex-a-countries-rules_en.pdf

Associated to H2020 countries:
http://ec.europa.eu/research/participants/data/ref/h2020/grants_manual/hi/3cpart/h2020-hi-list-ac_en.pdf

3. 2. English Language

The official language of OneNet Open Call is English. Proposals must be written in English to a full extent. If any part of the proposal is written in any language other than English, the entire proposal will be rejected.

English is the only official language during the whole procedure of OneNet Open Call for Third Parties. Any requested deliverables and/or reports shall be submitted in English, otherwise not accepted.

3. 3. Multiple Submissions

Only one proposal per applicant can be submitted to OneNet Open Call. If more than one proposal per applicant is identified, only the first one submitted in order of time, will be evaluated.

3. 4. Submission Tool

Only proposals submitted through OneNet Open Call portal (https://opencall-onenet.cintechsolutions.eu/) within the given deadline will be accepted. Proposals submitted by any other means, will not be considered for funding. All potential applicants should register beforehand to the portal to receive additional material and updates (if any) regarding the process.

Only the documentation included in the *Proposal Template* and the attachments to the above Template will be reviewed by Evaluators. The *Proposal* and its attachments can be only in PDF format. Please note that the information included in attachments will not be scored by Evaluators (as it is only considered as additional information supporting the proposal).

It is Applicant's responsibility to have all necessary information included in the *Proposal Template*. All information provided should be actual, true and complete and therefore allow the assessment of the proposal.

3.4.1. Complaint due to a technical error of the OneNet Online Submission System

If you experience any problem with the application submission system prior the deadline of the Open Call you should send an e-mail to onenet_opencall@cintechsolutions.eu and explain your situation.

If you believe that the submission of your proposal was not entirely successful due to a technical error on the side of the OneNet Open Call online submission system, you may lodge a complaint by emailing to onenet_opencall@cintechsolutions.eu and explain your situation. For the complaint to be admissible it must be sent within 4 calendar days following the day of the call closure. You will receive an acknowledgement of receipt, the same or next working day.

Important notice: You should secure a PDF version of all the documents of your proposal holding a time stamp (file attributes listing the date and time of creation and last modification) that is prior to the call deadline, as well as any proof of the alleged failure (e.g. screen shots) as you may be requested by the OneNet Helpdesk to provide these items.

For your complaint to be upheld, the IT audit trail (application log files and access log files) of OneNet Open Call online submission system must show that there was indeed a technical

problem at the OneNet Open Call side which prevented you from submitting your proposal using the electronic submission tool. Applicants will be notified about the outcome of their complaint within the time indicated in the acknowledgment of receipt. If a complaint is upheld, the secured files (provided to the IT helpdesk) for which the investigation has demonstrated that technical problems at the OneNet Open Call side prevented submission will be used as a reference for accepting the proposal for evaluation.

3. 5. Deadline

Only proposals submitted before the deadline will be accepted. Online submission system will automatically block after the deadline. Applicants will be able to resubmit their proposal until the deadline.

The deadline for OneNet Open Call is 01 February 2022 (17:00h CET Brussels time).

Applicants are strongly recommended not to wait until the last minute to submit their proposal. Failure of the proposal to arrive in time for any reason, including extenuating circumstances, will result in rejection of the proposal.

3. 6. Absence of Conflict of Interest

Applicants shall not have any actual and/or potential conflict of interest with OneNet Open Call process, from application to selected proposals' development phase. All cases of conflict of interest will be assessed case by case by the Support Team.

Conflict of interest may occur when there are conditions involving economic interest, political or national affinity, family or emotional ties or any other shared interest that might affect the objective evaluation of the proposal, as defined in the H2020 and EC regulations. Consortium partners, their affiliated entities, employees and permanent collaborators have not the right to participate.

3. 7. Other

Each applicant when submitting the proposal agrees that:

- the proposal submitted is based on original work and in advance any expected developments are free from Third Party rights, otherwise they are clearly stated.
- the proposal is not excluded under the provisions of article 19 of Regulation (EU) No 1291/2013 of the European Parliament and of the Council of 11 December 2013 (ethical principles).
- He/she understands and will sign all statements embodied in the Declaration of Honor document in case the proposal is selected. The Declaration of Honor document is available here: https://opencall-onenet.cintechsolutions.eu/?wpdmdl=1175
- he/she is not "undertaking in difficulty" according to the COMMISSION REGULATION (EU) No 651/2014 (Article 2.18)
- he/she is not excluded from the possibility of obtaining EU funding under the provisions of EU rules and regulations and/or national law.
- he/she has received knowledge of the Terms of Service and Privacy Policy of the Open Call portal (https://opencall-onenet.cintechsolutions.eu/terms-of-service-and-privacy-policy/).

4. Financial Support and Payment Conditions

4.1. Origin of Funds

In the H2020 Framework programme and according to the H2020 Rules for Participation Regulation No 1290/2013 (Article 23.7) "an action may involve financial support to third parties under the conditions defined in the Financial Regulation and the Rules for Application. The maximum amount of financial support is 60 000 EUR per Third Party."

(complete document is available on the following link: https://www.ffg.at/sites/default/files/downloads/page/h2020guidancenote_financialsupport2th irdparties.pdf)

Accordingly, OneNet launches OneNet Open Call to attract, select and provide financial support to Third Parties in order to adopt the OneNet infrastructure and framework and develop new innovative tools, services and activities. OneNet Open Call Services will be published on OneNet website and channels.

Selected Third Parties for funding will sign a Contract Funding Agreement with OneNet Consortium. The funds provided in the framework of OneNet project are funds owned by the European Union, whose management has been led to OneNet partners via the Grant Agreement Number 957739. OneNet is a mere holder and manager of the funds.

The relationship between selected applicants (legal entities with projects selected for funding by OneNet Open Call) and the OneNet Consortium, as well as selected applicants' obligations to both the OneNet Consortium and the European Commission, will be detailed in the Contract Funding Agreement. It is the responsibility of selected applicants to fulfil these obligations, and of OneNet Consortium to inform selected applicants about them.

4.2. Costs covered by Cascade Funding

The total funding provided by OneNet Open Call to each Third Party cannot exceed 60,000 €. Up to 20% of the budget can be reserved for equipment and consumables needed to implement the proposal, according to European Commission rules.

Only costs generated during the lifetime of the development of the proposal can be eligible. Please note that costs must be actually incurred (actual costs) and used for the lone purpose of achieving the objectives of the proposal and its expected results, in line with the principles of economy, efficiency and effectiveness.

4.3. Financial Support Criteria and Rules

The financial support follows the EU funding scheme (70% funding for for-profit organizations and 100% for-non-profit organizations). Selected Third Parties will receive a pre-financing of up to 25% of their respective total cascade fund. Further payments will be delivered after successful completion of milestones and/or deliverables.

The Cascade funding partner (responsible for the funding payments) will be authorized by the Project Coordinator to proceed with the payments when all necessary justifications (deliverables, reports and financial documents) - in fulfillment of the Contract Funding Agreement- are submitted by the Third Parties and accepted.
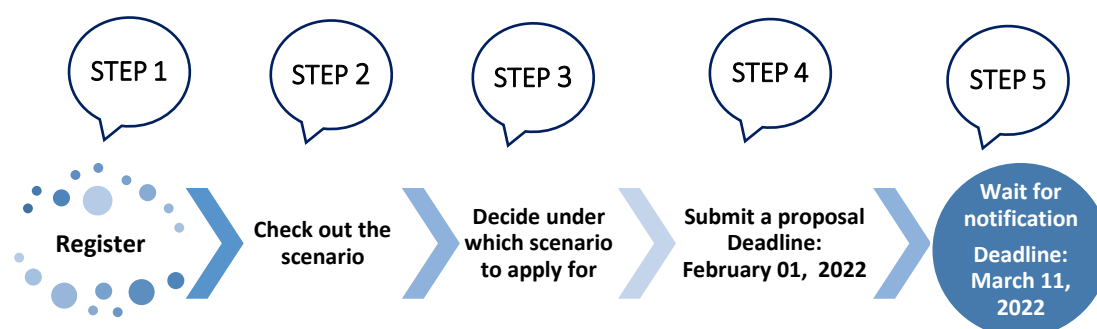
The Cascade funding partner can proceed with a payment only if all the conditions described in the Contract Funding Agreement are satisfied or if a sufficient evidence document is provided by selected Third Parties and accepted by the Mentoring team that is monitoring the action and subsequently by the Project Coordinator.

5. Proposal Submission

OneNet Open Call key dates:

- December 01, 2021 – Submission opening
- February 01, 2022, 17:00 CET – Submission deadline
- By March 11, 2022 – Results Announcement
- 5 business days after results notification – Objections
- April – Contracting Period
- May – Development phase begins

APPLICATION STEP

Proposals have to be submitted through OneNet Open Call portal. Applications submitted by any other means will not be considered for funding. All potential applicants should register beforehand to the portal to receive additional material, such us proposal template, declaration of honor, etc. and updates (if any) regarding the process.

The proposals – submitted only through the online tool – will include the following sections:

- Legal and Contact Information
- Proposal Description

  - (Scored) IMPACT
  - (Scored) TECHNICAL QUALITY
  - (Scored) QUALITY OF THE WORK PLAN

- Intellectual Property and Ethical Issues
- Third Party description

As noted above (Section 3.5), additional material/data, not specifically required in the *Proposal Template*, will not be assessed. The OneNet Consortium makes its best effort to keep all provided data confidential. However, for the avoidance of doubt, the applicant is the lone responsible to indicate its confidential information as such.

Applicant is the sole responsible for the verification of the *Proposal Template* completeness. Information not included in the *Proposal Template* will not be taken into account for assessment disregarding the reason for not being included.

Important notice: Applicants are strongly recommended not to wait for a last minute proposal submission. Failure for the proposal to arrive in time whatever reason, including extenuating conditions, will result in the rejection of the proposal.

PROPOSAL CONTENT

Only proposals with a clearly identified partner can be submitted. Content and structure should be based on the *Proposal Template* and address the issues detailed in this *Guide for Applicants*.

PROPOSAL LENGTH

The cover page and administrative data like proposal name and participant details cannot exceed two pages. The maximum length of the main proposal is 10 pages. Please read carefully the instructions included in the *Proposal Template* document available on the following link: https://opencall-onenet.cintechsolutions.eu/?wpdmdl=1173 .

SUBMISSION FORMAT

Single PDF file with less than 50MB in size.

6. Summary of evaluation process

The call and the selection of the Third Parties to be funded shall follow the same principles which govern European Commission calls as described in the *Guide for Applicants:*

Excellence. The proposal(s) selected for funding must demonstrate a high quality in the context of the topics and criteria set out in the call;

Transparency. Funding decisions must be based on clearly described rules and procedures, and all applicants should receive adequate feedback on the outcome of the evaluation of their proposals;

Fairness and impartiality. All proposals submitted to a call are treated equally. They are evaluated impartially on their merits, irrespective of their origin or the identity of the applicants;

Confidentiality. All proposals and related data, knowledge and documents are treated in confidence;

Efficiency and speed. Evaluation, award and grant preparation should be as rapid as possible, commensurate with maintaining the quality of the evaluation, and respecting the legal framework.

The evaluation workflow is described on the following chart:

6.1. Eligibility check

The Cascade funding partner performs a first check of admissibility and eligibility of submitted proposals according to the provisions and criteria set in Section 3 of the current document. However, a proposal can be declared ineligible at any phase of the evaluation procedure. As a result, the 'Eligible Proposals List' will be set out. The applicants will be informed by email whether they have passed the first Eligibility check or not.

6.2. Expert evaluation

Each eligible proposal is allocated by the OneNet partner responsible for the Open Call (CINTECH) to two Experts Evaluators from OneNet Consortium according to their field of technical expertise. The two Experts Evaluators assess independently the eligible proposal and prepare an Individual Evaluation Report (IER).

Each evaluator will rank the proposal assigning a score[1] from 0 to 5 for each awarded criterion IMPACT, TECHNICAL QUALITY, QUALITY OF WORK PLAN and conduct an Individual Evaluation Report (IER). The default threshold for each criterion is 3 out of 5. The default overall threshold is 10 out of 15.

The proposals shall address the following awarded criteria:

1. Expected IMPACT aiming at strengthening the use of the OneNet open reference architecture to provide innovative services to energy grid stakeholders (mainly focusing on household consumers):

- Is there a measurable enhancement in the management of energy (produced and consumed by households) if applicable for the scenario?
- To what extent has the proposal the potential to address future / wider applications in the field?
- Does the proposed service/tool/activity to be developed add a new approach to the improvement of the energy system operation, and specifically on the facilitation of Flexibility market access, and/or on TSO-DSO cooperation, and/or uptake of OneNet proposed products and services?

2. TECHNICAL QUALITY:

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[1] The scores range from 0 to 5.

0 – Fails The proposal fails to address the criterion under examination or cannot be judged due to missing or incomplete information;

1 – Poor The criterion is addressed in an inadequate manner, or there are serious inherent weaknesses;

2 – Fair While the proposal broadly addresses the criterion, there are significant weaknesses;

3 – Good The proposal addresses the criterion well, although improvements would be necessary;

4 – Very good The proposal addresses the criterion very well, although certain improvements are still possible;

5 – Excellent The proposal successfully addresses all relevant aspects of the criterion in question. Any shortcomings are minor.

- To what extend does the proposal addresses the scenario's initiative/ requirements under, which it is submitted to?
- Are the use cases and the technical approach for the adaptation/integration of the addressed scenario following the current state-of-art?

3. QUALITY OF WORK PLAN:

- Is the work plan coherent and effective and appropriate regarding the allocation of tasks and resources?
- Is the work plan coherent and effective and appropriate regarding the justification of resources?
- To what extent does the application identify the implementation risks (technical, commercial and other) and how the work plan foresee to mitigate these risks?

6.3. Consensus meeting

Following the Individual Evaluations phase, a Consensus meeting will be realized between the two Evaluators to exchange views on the basis of the individual evaluations. The initiative is for the two Evaluators to come to an agreement on the comments provided for each criterion and reach to a consensus report (CR). The outcome of all CRs will be an 'Initial Ranking List' of the eligible proposals based on the individual scores assigned to each proposal.

6.4. Evaluation Panel Meeting

The Evaluation Panel (Support Team and all Evaluators) will identify the most promising candidates through an Evaluation Panel Meeting. The scope of the Panel Meeting is to perform an additional quality check to the reports, to prioritise ex-aequo cases and to approve the 'Final Ranked List' of proposals.

The OneNet Consortium wishes to cover all the offered scenarios as these are indicated in Section 2.1 to ensure a balanced portfolio, therefore the following exception applies:

Open Call grants will be awarded to applications not only in order of ranking but at least also to those that are the highest ranked within set scenarios, provided that the applications attain all thresholds.

Following this exception and should two or more proposals are above threshold ranked with the same score, the prioritisation will be as follows:

-Proposals will be prioritised according to the scores for the criterion Impact.

-When these scores are equal, priority will be based on the scores for the criterion Technical Quality.

-When these scores are equal, any further prioritisation will be based on the criterion of the Gender Equality.

As an outcome of the Panel Meeting, one 'Final Ranked List' (up to 9 Third Parties) will be produced. The exact number of proposals selected will be decided based on the overall quality of the proposals. A 'Reserve List' will also be produced with the next ranked proposals in case a selected Third Party fails to sign the Contract Funding Agreement for any reason.

Evaluation Summary Reports (ESRs) with the results of the evaluation process will be communicated to the applicants by email within 30 business days from the submission closure.

7. Contract Funding Agreements process

Selected Third Parties will be checked against the fulfilment of the legal requirements in order to procced with the signature of the Contract Funding Agreement with OneNet Consortium. Third Parties included in the 'Final Ranked List' will have to provide all necessary documentation required to prove their compliance with the Eligibility Criteria described in Section 3.

Specifically, selected Third Parties will have to provide the following documentation:

- **Legal existence**. An original of the Legal Entity Form together with copies of supporting documents such as Company Register, Official Gazette or other official document per country are required. These documents shall show the name of the organisation, the legal address and registration number and, if applicable, a copy of a document proving VAT registration (in case the VAT number does not show on the registration extract or its equivalent) needs to provided.
- Recent certificates issued by the appropriate national competent authorities that provides **evidence covering all taxes and social security contributions** for which the third party is liable, including for example, VAT, income tax (natural persons only), company tax (legal persons only) and social security contributions are required.
- A recent **extract from the judicial record** is required or, failing that, an equivalent certificate recently issued by a judicial or administrative authority in the country of establishment of the person proving that the above requirements are satisfied.
- An **original of declaration of honor** signed by the (legal) representative.
- **Bank account details**: The account where the funds will be transferred will be indicated through a bank identification form signed by the Third Party. The form has to be signed by the bank, otherwise a recent bank statement clearly showing the account holder, the bank name and the bank account (IBAN and BIC) is needed.
- **Signature of the Contract Funding Agreement.**

The above documentation will have to be provided within deadline communicated selected Third Parties (during or after objections period). If the requested documentation is not provided in time, this will directly end the Contract Funding Agreement process and Third Parties enlisted in the 'Reserve List' will substitute the above ones in order of ranking.

8. Applicants communication

8.1. General communication procedure

Applicants will receive communications after the Eligibility Check evaluation phase indicating if they passed or failed the eligible criteria. Following the Evaluation Panel Meeting, applicants will receive by email the Evaluation Summary Reports with justifications for their proposals' success or exclusion within 30 business days from the submission closure.

8.2. Objections

If an applicant considers that a mistake has been made or that Evaluators have failed to comply with the rules and conditions of OneNet Open Call for Third Parties or acted unfairly and that her/his interests have been prejudiced as a result, can send his/her objections for review 5 business days after receiving the Evaluation Summary Report to the following email address: onenet_opencall@cintechsolutions.eu

The objection shall be written in English and include the following information:

- Contact details (including postal and e-mail address).

- The subject of the objection.
- Information and evidence of the stated objections.

Anonymous emails will not be considered.

Please note that as a general rule, the OneNet Support Team will investigate the complaints with a view to arriving at a decision to issue a formal notice or to close the case within no more than five business days from the date of reception of the complaint, given that all the required information has been submitted by the complainant. Whenever this time limit is exceeded, the OneNet Support Team will inform the complainant by email of the reasons for the unforeseen delay and the subsequent steps.

9. Obligations of the selected Third Parties

Third Parties selected for funding must ensure that they comply with specific obligations originally detailed under the Grant Agreement between the OneNet Project and the European Commission. These obligations are clearly stated in the Contract Funding Agreements signed between OneNet Cascade funding partner and selected Third Parties.

When signing the Contract Funding Agreements with OneNet Cascade funding partner and thus accepting to receive funding grants owned by the European Commission, Third Parties apply a relation between themselves and the European Commission through OneNet Project that carries a set of obligations to the Third Parties with the European Commission.

All selected Third Parties shall comply with the following obligations:

- Avoidance of conflicts of interest
- Confidentiality
- Dissemination of the action and visibility to the EU funding
- Liability for damages

Selected Third Parties must accept the right of control of the European Commission, OLAF and the Court of Auditors and the right for the European Commission to make an evaluation of the impact of the action. In order to be able to fulfil these obligations, the contractual arrangements on the Third Parties will be included in the Contract Funding Agreements (including control measures and/or reducing the financial support).

10. Service Development

Following the signing process of the Contract Funding Agreements, the selected Third Parties will develop the proposed services as described in their submitted proposals and in respect to the conditions detailed in their Contract Funding Agreement.

The Contract Funding Agreements enter into force on the date of the signature of the last signatory. The expected start date of the service's development phase is the date stated and agreed in the Contract Funding Agreements. The development phase will be a single-phase process, with pre-defined deliverables and milestones to be achieved.

10.1 Service Execution

Selected Third Parties need to expand upon and validate their service from a business and a technical perspective. All funding proposals will receive support from the OneNet Open Call Mentoring Team to help them understand the technical requirements of the scenario they are addressing, including: online resources and documentation, webinars to provide information on OneNet and scenarios' scope and demands. Expectations from the tasks, deliverables and/or

reports of its proposal will be discussed through individual meetings between Third Party and its Mentoring Team.

A number of deliverables are required minimum:

1.   **Mid-term report:** A description of the methodology (solution design, methodological approach, technical / business design, expected results, etc.)
2.   **Final report:** Final solution technical / business design, results, tests, assessment, conclusions)

All required documentation and services are expected to be submitted before the defined deadline. If a Third Party fails to have its service ready or to submit its documentation on schedule, they will not receive the cascade fund. The overall duration of the development phase is up to 6 months with the possibility to extend two weeks for the quality improvement of the deliverables.

OneNet pursues an open, public and transparent workflow. Unless it goes against the legitimate interests of the Third Party the above mention reports should be published on the OneNet website. Publishing a shorten version of the mentioned report to protect the legitimate interests of the Third Party may also be an option.

10.2 Payment breakdown

The amount of the cascade fund cannot exceed 60,000 euros per Third Party. The breakdown and the different percentages are explained in the table below.

TABLE. BREAKDOWN OF THE PAYMENT STAGE	
Payment Portion	**Stage**
25%	Pre-financing for project work commencing
45%	Following the successful submission of the mid-term report
30%	Following the successful submission of the final report

11. Other considerations
11.1. Legal framework

Applicants must acknowledge that all data and documents provided through the OneNet Open Call process will be used by the OneNet Consortium, European Commission and other entities involved in this call from submission to selection and funding and development procedures. According to H2020 rules and guidelines, OneNet partners have the right and will keep internal records including:

- A list of submitted proposals, identifying the name and address of applicants.
- Communications with applicants before proposals' submission deadline and during the evaluation process.
- Names and affiliations of the members of the Steering Committee.
- A copy of the submitted Proposal Templates assessed during the evaluation process.
- A record of all incidents occurred during the evaluation process and any deviation from the standard procedure.

- Copy of requests for payment and attached documentation.

Any data, knowledge and information communicated as confidential in the framework of an action shall be kept confidential, taking due account of European Union law regarding the protection and access to classified information. Selected Third Parties shall comply with national legislation, regulations and ethical rules in the countries where the service will be carried out.

11.2. Privacy

Personal data shall be collected, processed and published in accordance with Regulation (EU) 2016/679, also known as GDPR (General Data Protection Regulation). Regarding the processing of personal data, please refer to OneNet Open Call portal's Privacy Policy on the following link: https://opencall-onenet.cintechsolutions.eu/terms-of-service-and-privacy-policy/

11.3. Ethical Issues

Research activities in Horizon 2020, and specifically OneNet, should respect fundamental ethical principles, particularly those outlined in "The European Code of Conduct for Research Integrity" that is available on the following link: https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/european-code-of-conduct-for-research-integrity_horizon_en.pdf

12. Available documents

All OneNet Open Call documents and templates can be downloaded from the Open Call portal on the following link: https://opencall-onenet.cintechsolutions.eu/important-documents/

This Open Call supporting documentation includes:

- Open call announcement
- Open call Guide of Applicants
- Open call Proposal Template
- Open call Declaration of Honor

13. Applicants' Support

For more information and/or details about the OneNet Open Call, please advise the *Frequently Asked Questions (FAQs)* subpage available here: https://opencall-onenet.cintechsolutions.eu/frequently-asked-questions/

For additional information on the Open Call, any queries concerning eligibility criteria, data to be provided in the *Proposal Template*, or for questions about the submission process or any portal issues, please contact the OneNet Open Call Helpdesk by email: onenet_opencall@cintechsolutions.eu.

Please include the following data in your email message:
- username, telephone number and email address
- details of the specific problem (error messages, bugs descriptions, etc.)
- screenshots of the problem you encounter

Annex 1
Scenario No 1. : Deep power system analysis through GIS server application (Georeferenced power system modeling and analysis utilizing the geo-server)

Cluster / demo area

Southern cluster/Greek demo.

Type of service: Detailed power system analysis with Geographic Information system (GIS) implementation.

Power system analysis on the selected region (Crete island and Peloponnese) including both TSO and DSO grid simulation models that will be available,

Geographic visualization of simulation results. Exposing results and linking to other services being developed under f-channel via GIS technologies.

Figure 1 High resolution deep network modeling beyond the current TSO/DSO scope

Service can be used in any use case which is related to displaying and querying geographical data and power system simulations.

Technical details: GIS technology integrates common database operations such as query and statistical analysis with the unique visualization and geographic analysis benefits offered by maps. These abilities distinguish GIS from other information systems and make it valuable to a wide range of public and private enterprises for explaining events, predicting outcomes, and planning strategies. Spatial query is implemented for purpose of easier calculation and better User Experience.

Figure 2 – Proposed system layout for the F-channel

Figure 3 – F-channel foreseen system architecture

Figure 4 – System architecture with integrated georeferenced calculation engines and web results display
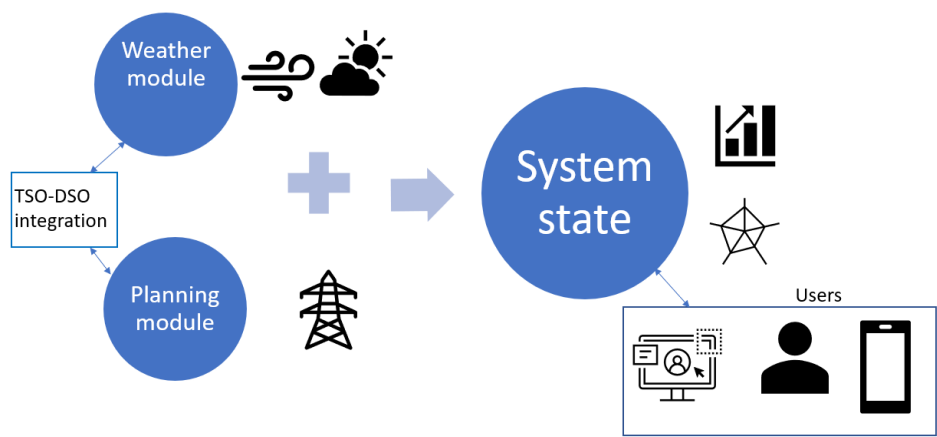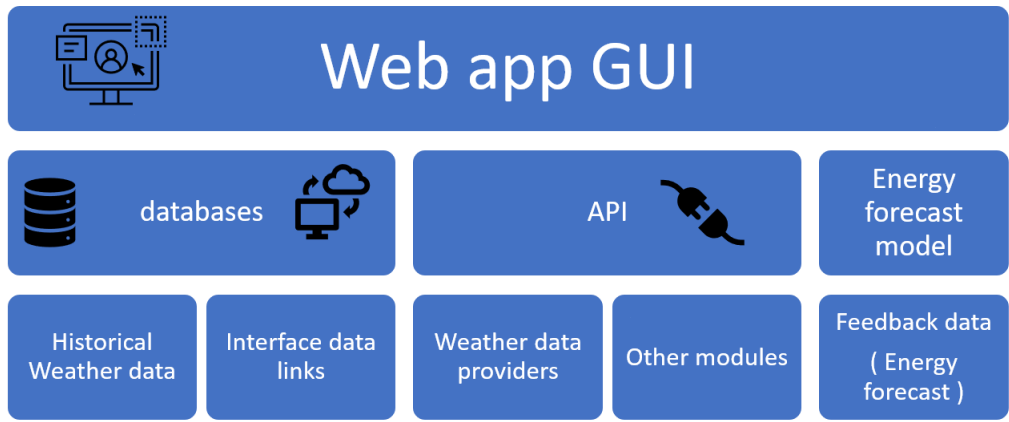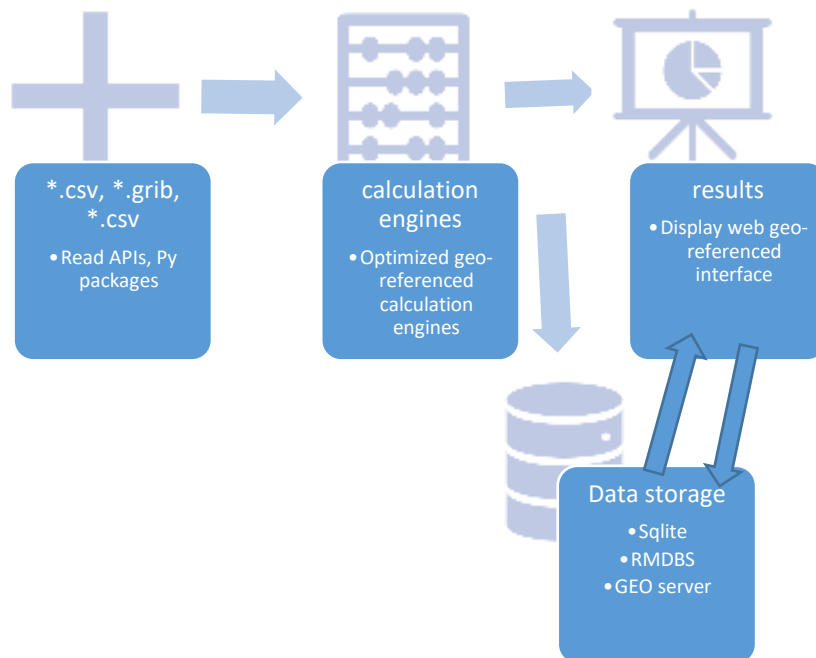
Georeferenced deep/vertical grid modeling: In order to allow for deep grid analysis, it is necessary to model the system to the lowest level entity, DSO MV/LV substation (e.g. 10/0.4 kV) or a commercial/industrial/residential building possessing its own MV/LV substation. Entity's model depends on the entity demand behavior (depending on the weather forecast and historical data) and the total power generated by the distributed energy resources (DERs) connected to it (again highly dependent on the weather and historical data). The latter is affected by: the type of each DER, weather forecast data, geographical data (GPS coordinates of DERs), DER network topology data, their availability data, etc. Task will be to develop a model of the network starting from these lower level entities for the predefined set of Points of Interest and then to provide different levels of aggregation for the higher level users DSO, TSOs, and/or RSCs.

All information collected on all mentioned modelled levels is intended for TSO's and DSO's better operational planning through congestion management and balancing reserves need and availability forecasting.

Our approach which we would like to develop and test is based on "intra" oriented mechanisms, offering an adding value to other ongoing approaches related to congestion management and energy balance issues, dealing with "inter" oriented mechanisms: inter aerial, inter TSOs or even inter regional Pan-European mechanisms. These inter oriented approaches are obviously necessary and they result in better utilization of the available energy reserves, but they neglect additional resources of energy reserves and congestion relief measures that origins in the lower voltage levels (in DSOs and further, deeper in the system, on the node level).

Figure 5 contains a topology connection graph showing directions of both aggregation and information flow which should be developed. It is obvious that the proposed model that should be developed possesses a higher resolution than the existing ones, enabling improved operational planning especially on TSO and RSC levels and offering congestion management engine for both grids, DSO and TSO operated. The same model can be applied for any type of a micro grid, being in parallel or in an island operation with the rest of the system.
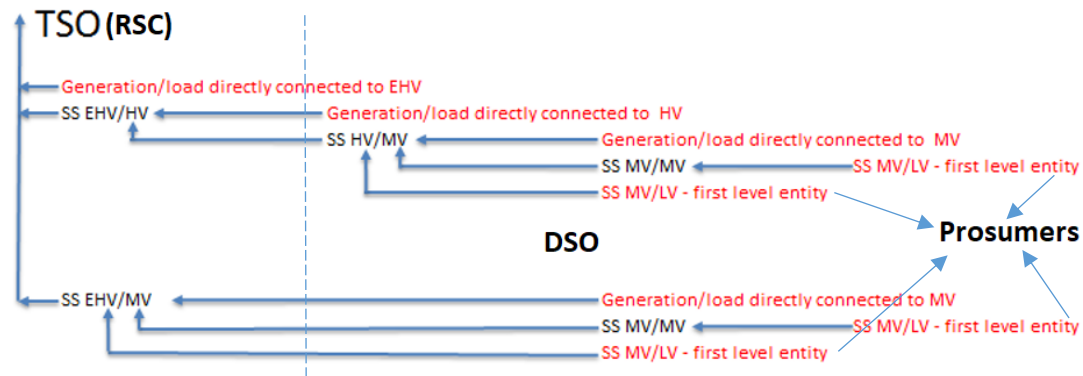

Figure 5

Addressed to:
Potential applicants are ICT and Energy consultancy companies with relevant expertise in field of GIS implementation and power system analysis and simulations. Experience in Spatial database implementing is also mandatory.

Description of the scenario

Initiative:
Exact Workflow GIS software and hardware are to be implemented on EIG existing infrastructure. Relevant data to be presented to user are grouped in layers which are presented to Third party for purpose of service development. During development several checkpoints/milestones are to be identified and verified.

Expected outcome: Fully functional GIS server incorporated with the comprehensive power system analysis toolbox on EIG infrastructure with possibilities for further development and maintance by EIG.

Important information for applicants:
https://www.esri.com/en-us/arcgis/open-vision/initiatives/standards-specifications

Third Parties benefit from getting involved in the scenario:
Gaining experience in energy sector. Possible further cooperation.

Incorporation of Third Parties for network operators and household consumers:
Easier and faster implementation of demo. By using specialised third parties, more resources can be focused on development of network/weather models which are core functionality of flexibility channel.

Added value on OneNet project:
If shown applicable, service can easily be upscaled to other services since involved both DSO an TSO.

Annex 2
Scenario No 2. : Active participation of an actual prosumer to the Cyprus demo and its coordination by the ABCM-D platform

Cluster / Demo area

Southern cluster / Cyprus demonstration.

Technical details: The applicants must develop a prosumer-level energy management solution with API framework to facilitate the secure interconnection between the ABCM-D platform and the prosumer. It should be noted that the ABCM-D platform will be used in the Cyprus demonstration of the OneNet project for providing the capabilities to the DSOs to: (1) monitor in real time the operating condition of the distribution grid through SCADA and smart meters measurements, (2) prequalify any products and services procured to the market by the FSPs located at the distribution level in order to ensure the safe operation of the distribution grid, (3) coordinate the flexibility services provided by the FSPs in the distribution grid, (4) evaluate online the response of the FSPs during and after the provision of services for frequency balancing and congestion management. In addition, the prosumer-level energy management solution (of the third party) should be able to exchange information with the ABCM-D platform related to: (a) fast reporting consumption and generation measurements from the prosumer and (b) coordination signals sent by the DSO for provision of ancillary services by the prosumer.

The applicants must have at their disposal a prosumer that will be equipped with a three phase interconnected PV system with at least 5 kwp installed capacity, battery energy storage system, fast reporting smart meter (with at least 400 ms reporting rate) and be able to provide active and reactive power regulation services within a range of 5 seconds. The prosumer must be located in Cyprus in order to have identical environmental and operating condition with the digital twin of the Cyprus power system. The prosumer will contribute to the voltage and congestion management services that are directly linked with the two BUCs of the demo. The interface between the prosumer and the ABCM-D platform should be able to send measurements regarding the operating conditions at the prosumer level (through smart meter, PV inverter) and receive coordination signal provided by the ABCM-D platform to regulate the operation of the flexible resources. The communication should be secured either by encrypted communication protocol over the internet or through secure VPN channel.

Addressed to:

SME that can provide a flexible energy management solution and will enable the interconnection of the prosumer with the ABCM-D platform. The expertise field of the potential applicants should include, control and management of energy storage and PV systems, monitoring of prosumer operation status, API development.

Description of the scenario

Initiative: Enable the participation of an actual prosumer in the Cyprus demonstration

Exact Workflow: The energy management system at the prosumer level will send smart meter measurement to the ABCM-D platform (located at the UCY (DSO control center emulator)). The prosumer will be emulated in the digital twin of the distribution grid (using the field measurements). Based on the operating condition of the distribution grid, the ABCM-D platform will define and send the coordination signals to the flexible resources of the distribution and to the actual prosumer. The energy management system at the prosumer level will receive the coordination signals and will manage its own resources to satisfy the DSO requests.

Expected outcome: Validate the control of the prosumer by the ABCM-D platform in real environment and demonstrate the impact on the distribution grid operation by the active coordination of end-users.

Important information for applicants:

Brief information with the power system testbed where the energy management solution of the applicant should be interconnected:
https://www.kios.ucy.ac.cy/index.php/research/research-infrastructures/power-systems-testbed.html

More information will follow as the demo is implemented.

Third Parties benefit from getting involved in the scenario:

Participation in a prestigious EU project that will allow the applicants to showcase their solutions in a realistic environment for active distribution grid.

Incorporation of Third Parties for network operators and household consumers:

The third party will involve an active household consumer that will be coordinated by the rules defined at the Cyprus demonstration. The network operator will be able to receive fast reporting measurements from the prosumer and will coordinate its operation for the provision of ancillary services to the active distribution grid. The incorporation of an actual prosumer to the Cyprus demo of OneNet and the ability of the operator to actively coordinate its operation will demonstrate the benefits of the active distribution grid.

Added value on OneNet project:

The interconnection of an actual prosumer to the Cyprus demonstration system and its coordination through the ABCM-D platform will be showcased in a real-life demonstration. The scenario will highlight the impact on the distribution grid operation by real time coordinating of the end-users. Furthermore, through this scenario the importance of enabling the synergies between the DSO and the prosumer will be emerged. The third-party involvement to the OneNet project with the incorporation of an actual prosumer will facilitate the acquisition of fast reporting data (from the prosumer side) and the exchange of information between the prosumer and the operator. This information exchange can be either enabled by direct communication between the ABCM-D platform and the prosumer energy management platform or through the OneNet system.

Annex 3
Scenario No 3. : DSO-TSO interaction

Cluster / Demo area

Western cluster / Portuguese Demonstration

Type of service: Set of APIs and related services (potential links with existing systems, backend servers and databases) to enable a streamlined automated communication between system operators, namely the Portuguese DSO and TSO. These services will allow the exchange of operational planning information to facilitate the definition of necessary actions in order to avoid grid constrains and ensure as secure and reliable grid operation.

This service is related to our Business Use Case (WECL-PT-03)[2], where we will exchange information in several timeframes in order to improve DSO and TSO operational planning.

Addressed to:

Software Development expertise with experience in the energy sector.

Description of the scenario

Initiative: The set of APIs and related services will be implemented in order to exchange the following information:

- Plan of grid investments foreseen
- Expected evolution of the supply
- Expected evolution of the consumption
- Annual maintenance plans
- Generation forecast

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[2] Please consult the page 22 of the following document.

Exact Workflow:

Third Parties benefit from getting involved in the scenario:

The companies that collaborate in this project will be developing their capacities and applying their skills within the energy area. It may also be an opportunity for them to grow as companies since the experience gained in this project will allow them to work in future projects involving system operators either in Portugal or in another European country.

Added value on OneNet project:

The solution we intend to implement meets the scope of the OneNet project, since based on these information exchanges it will increase the accuracy of the amount of flexibility required by both system operators. Furthermore, our goal is to develop a solution that can later be replicated by all European system operators.

Annex 4
Scenario No 4. : Flexibility Provider engagement to test local markets able to alleviate network congestions at medium and low voltage network levels

Cluster / Demo area

Western cluster / Spanish Demo

The Spanish Demo has the commitment to test a system that enables flexibility services providers (FSPs) to provide services to DSOs to manage congestion problems. For this scope the demonstration needs to engage customers and make available for the market their flexibility services developing the appropriate communication and interaction tools.

Flexibility can serve as an alternative to network reinforcement when it is more cost-efficient than traditional reinforcement of the network.

Specific service:

Flexibility Service Providers that offer different type of flexibility resources to test new local markets able to alleviate network congestions at medium and low voltage level. A Flexibility Service Provider (FSP) is either an aggregator, providing flexibility services, or the owner or the representative of large-scale or small-scale assets, which are connected to the distribution network and which can provide flexibility services to DSOs.

FSP will be able to communicate with DSO and MO and is expected to provide the flexibility upon the DSO's call. The communications will be done through DSO and/or MO specific platforms.

The FSP must specify the kind of resource/s and the volume of available flexibility.

Addressed to:

Any entity able to provide flexibility services for DSO, as an owner, individual distributed energy resource, or aggregator, and develop the necessary tools for communications and interactions to be involved in the demos.

FSPs participating should have resources connected to medium or low voltage levels at DSOs networks participating in Spanish demo, with at least 0.1MW of capacity for flexibility.

The resources have to be connected to medium voltage or low voltage level in some of the following areas:

- Murcia:
  - North of Murcia, close to Espinardo neighborhood
- Madrid:
  Prioritary:
  - Cantoblanco, in the north of Madrid
  - Alcalá de Henares
  Secondary:
  - Torres de la Alameda, or
  - Downtown Madrid

Recipients are requested to demonstrate clearly in their expressions of interest that they are very aware of the areas in which their specific services fit best the project goals and the ongoing developments.

Description of the scenario

The FSP will be able to participate in local markets to alleviate network congestions as flexibility service provider role, being involved in the following scenarios:

- Prepare/Pre-qualification: process to ensure that a particular FSP can deliver a given product
- Market phase: FSP is expected to provide the flexibility upon DSO's call to procure availability or availability and activation. Markets are cleared and FSPs are nominated to deliver the product.
- Monitoring and activation: The DSO will monitor the conditions of the grid in real time and send the activation signals to the FSPs committed in the market phase, in accordance to the type of procured product.
- Measurement phase: the MO and/or DSO will verify if the FSP flexibility was provided in accordance to the product procured in the market phase.

Important information for applicants:

FSPs participating should have resources connected to medium or low voltage levels at participant DSOs networks in some of the areas indicated above.

Potential aggregators must attach documentation evidencing commitment of resources from the FSPs that they represent.

Minimum required flexibility capacity of 0,1MW

The FSP will be evaluated considering the following aspects:
- Type of resources commitment
- Geographical location
- Availability and capacity for resources activation
- Price for availability and activation
- Agree to communication and cooperation activites
- Viability of technical solution for monitoring and receiving set points
- Innovation degree

Third Parties benefit from getting involved in the scenario:

Third parties involved will learn from the Project how to join flexibility markets and identify potential benefits and issues to overcome.
They could develop and test new tools and technologies to be ready to participate in the future markets.

Incorporation of Third Parties for network operators and household consumers:

The participation of flexibility providers would demonstrate the capacity of the pilot to open the market to external actors (household consumers) to collaborate to manage network problems.

Added value on OneNet project:

The third parties involved will help the Project to:

- Demonstrate the provision of flexibility services and analyse the behaviour of different type of flexibility resources.
- Improve innovation capacity of the project supporting preparation and project implementation.

- Increase the amount and value of the collected market results information to be sent from the Local Market Platform to the OneNet system.
- Strengthen the OneNet community.

Annex 5
Scenario No 5. : Flexibility resources to provide flexibility services to the Northern Demonstrator

Cluster/ Demo areas
Northern Cluster (Finland, Estonia, Lithuania, Latvia)

Type of service: The applicant should develop steerability of electric loads/generation/storage and integration of the steerability to the OneNet market framework. In various markets there are different positions available in the chain from the load until the market.

In the Finnish market the OneNet -project has a flexibility service operator that it's possible to collaborate with to access the markets. In the other Northern demonstrator market areas the applicant will have to cover the flexibility service provider's market operation role.

The demonstrated flexibility products range from long-term flexibility products (months to years ahead) to near-real-time flexibility products (15 minutes), including active and reactive power. Products are described in OneNet deliverable D2.2 chapter 6.1. The applicant should describe in the application which flexibility product the applicant is capable and interested to provide.

The applicant will be part of
the Northern Cluster Business Use Case described preliminary in OneNet deliverable D2.3.Business Use Cases for the OneNet, in chapter 9.2.1 in the role of FSP.

Technical details:
Flexibility provider, either in a role of FSP or co-operating with FSP
A company that can provide a technical solution for steering of appliances e.g heat pumps, electrical car chargers, boilers etc. in order to give the project a larger base of resources to steer. This could enable a commercial demonstration.

- The Flexibility Provider can provide their own aggregation platform
- The Flexibility Provider should describe the general attributes of their own platform. Steering signals can be provided directly by Flexibility Provider or via some other project partner acting in the FSP role.
- The Flexibility Provider should provide a technical solution for steering of electrical equipment and appliances from distributed resources and have the possibility to steer the electrical load of their end-customer resources.
- Depending on the Flexibility Provider capabilities some requirements for reporting back to the FSP.
- The Flexibility Provider should specify the type and volume of resources available for flexibility.
- The Flexibility Provider should provide an incentive to end-consumers for participation on the flexibility markets.

Addressed to:
Any party who has the possibility to steer electrical appliances or would develop a system to steer distributed resources and develop required flexibility provision. The Flexibility Provider should have resources available for steering. Flexibility Provider could be Flexibility Service Providers/electricity companies acting in Finnish, Estonian, Latvian or Lithuanian markets.

Description of the scenario

Initiative: Controlled steering of the flexibility resource loads or/and acting as Flexibility Service Provide in the market demonstration. The markets address the flexibility needs of the system operators

Exact Workflow: (including the party that this toolbox will be accommodated in and/or where assessment/validation will take place within a realistic setup)

The party has resources that they can control through an integration to a steering platform. FSP has a contract with the end-customer about flexibility service provision and registers the flexibility resources in the flexibility register, this includes also location of the individual resource (metering point identification). OneNet systems will perform resource and grid qualification. After qualification FSP offers the flexibility to the relevant market.

If the flexibility is called-off on the market a steering signal regarding the activation is entered into FP's –aggregation and steering platform. The Flexibility Provider (desired Party) will then, upon the given signal, steer the right resources accordingly. The activation/steering needs to be metered and validated. Metering data will be delivered to flexibility register.

Connections between the applicant and Northern Cluster OneNet system will be handled via REST API.

Preferred minimum bid size of the flexibility resource in total is 100 kW but the applicant can justify also other sizes if the resources seem relevant for the future flexibility service provision.

Expected outcome: Steering of an electricity resource in accordance with the market regulations and demand.

Important information for applicants:
- The vendor should provide a technical solution for steering of electrical equipment and appliances from distributed resources and have the possibility to steer the electrical load of their end-customer resources.
- Depending on the vendor's capabilities some requirements for reporting back to the FSP.

Third Parties benefit from getting involved in the scenario:
The applicant can develop and test technologies for steering electrical consumption/distributed production/ storage and aggregation. The applicant will gain experience for new market framework and integration to aggregation and steering platform.

Providing flexibility services can be a new revenue stream and new business models can be developed. Companies providing e.g. renovation services for transferring heating from fossil fuels to a electricity -based solution are greatly dependent on the price of electricity vs. fossil fuels. The market for charging of electric vehicles (EV) and other flexible assets is expanding and is a potential source for flexibility on the electricity market. Adding the possibility to participate to flexibility markets can lower the electricity cost and even a small change in the cost of electricity can turn a negative business case into a positive one.

Early experience from the evolving markets helps companies to design their steering systems to suit the market requirements regarding e.g. speed, reliability, and accountability.
As FSP you will have the opportunity to grow your product portfolio. You will get closer to your customers, and gain knowledge and understanding of their needs and restraints. Participating in the pilot will increase the understanding of new flexibility markets and the new technologies for steering.

Incorporation of Third Parties for network operators and household consumers:
The applicant could target household consumers (or any other distributed flexibility resources). The demonstration enables more customer participation in the project and on the flexibility market and can provide advanced solutions to be deployed outside the project in the future.

Added value on OneNet project:
1. Additional flexibility service provision.
2. Additional flexibility resources to steer. Better understanding of how to involve end-customers and how to aggregate small, distributed resources. Different type of resources provide additional information on how the resources are capable of providing flexibility products for various system operator needs.
3. More diverse validation of the demonstration results.

Annex 6
Scenario No 6. : Advanced Data Quality Analysis of Data Exchange Platforms
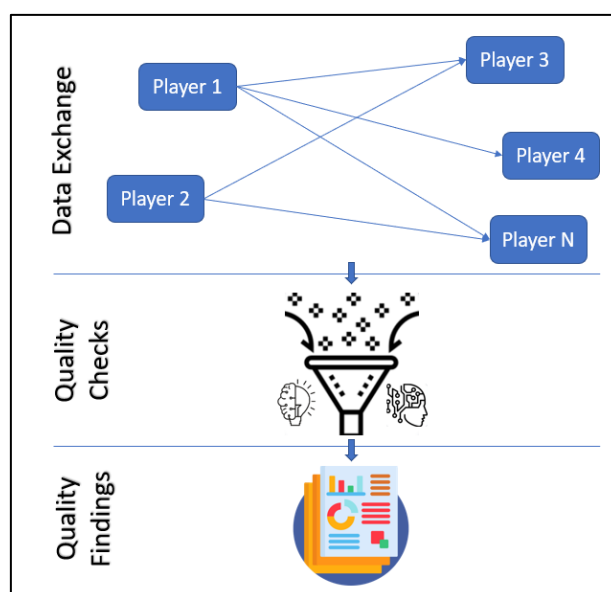
The scenario aims to encourage the development of tools and services for data quality checks from a general perspective that will be flexible enough to adapt to the different needs of data exchanges among TSOs, DSOs and consumers. The developed tool is expected to be part of project's middleware to measure the quality of exchanged data based on proposed methodologies. Considering the rich content of the ENTSO-E Transparency Platform (TP), the applicants are encouraged to demonstrate developed methodologies utilizing the TP data to test the performance of the developed tool in addition to identifying data quality issues on the TP.

Specific service

The service is to apply advanced machine learning algorithms on the data exchanged between different players in the TSO-DSO-Consumer value chain. The developed service will also serve for the Transparency Platform to enhance the quality of the data by highlighting the abnormalities. In particular, the service should be able to detect outliers from timeseries where standard methodologies are not sufficient.

The service will have a link with the T5.4 related to AI and big data. It will also be generally beneficial for the overall OneNet architecture to enhance the quality of the data with large amount of data coming from distributed sources.

For the tool's development purposes data from the Transparency Platform can be used as an input. The output will be the result of the data quality analysis.

Addressed to:

The development of the expected tool under this scenario requires expertise in the fields of Big Data Analytics, Machine Learning and advanced AI methodologies to perform data quality measurements in the energy domain. Start-ups, SMEs from the field of data service provision and aiming to be part of TSO-DSO-Consumer value chain are welcome to apply.

Description of the scenario

The service provider downloads the data from the Transparency Platform (starting with one data item).

The service provider develops an algorithm that enable to apply machine learning on timeseries. The algorithm is trained on historical data from the Transparency Platform and enables to predict the outliers or wrong data in the new published data as well as on the Transparency Platform historical data. The proven service will also serve for the data quality measurements for the exchanged data in OneNet demos. After completion of OneNet project, the developed tool under this call shall be accessible to the beneficiaries of the project on royalty-free basis.

Important information for applicants

The applicants are expected to use data exchanged in OneNet demos as well as the the ENTSO-E Transparency Platform data to develop tools and services to perform data quality checks and asses the data quality on the platform with the proposed methodologies. As the Transparency Platform offers a wide variety of data, the applicants can focus on a smaller subset of data items under the scope of this scenario.

The following parts of this section will provide a general overview of the Transparency Platform data and data download options from the platform.

Available Data on the Transparency Platform

In accordance with Regulation 543/2013, the ENTSO-E Transparency Platform was launched on 5 January 2015. Following the launch of the new platform, the www.entsoe.net website, on which TSOs had voluntarily published some market data since 2011, was de-commissioned in March 2015. The historical data from 2011-2014, which was previously published on entsoe.net, is available to download from the Transparency Platform > Data Pre-5.1.15 section.

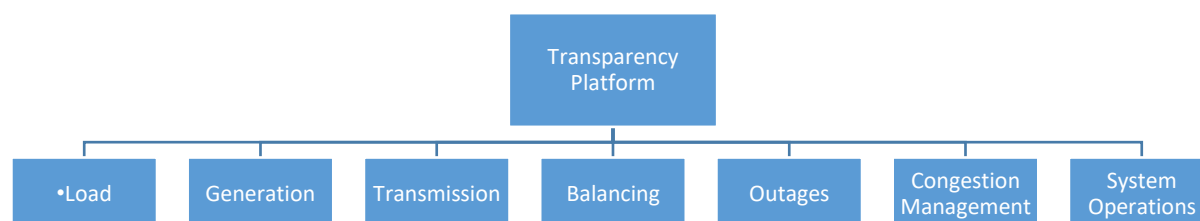Currently, data on Transparency Platform is published under 7 different domains.

Figure 1. Data Domains on Transparency Platform

Load: Within this domain, actual total load for and load forecast data with various horizon (day, week, month, year) is presented.

Generation: Data regarding installed capacities, generation and generation forecast is presented.

Transmission: Data about cross border power transfers and forecasted capacities is revealed.

Balancing: Under this domain, data regarding to keep the electricity grid balanced is published. This includes bids data, accepted offers and activated reserve information including prices besides balancing state of the areas.

Outages: Within this domain, data regarding planned maintenances and forced outages in the grid is published.

Congestion Management: Data about actions taken to relieve overloaded parts of the transmission grid is published.

System Operations: Data about operational agreements and frequency quality is published.

<u>**Data Download Options from Transparency Platform**</u>

TP offers various ways of data export alternatives. In order to meet the different user needs, followings options are available:

- Web GUI – <u>Transparency Platform</u>
- SFTP – <u>User Guide</u>
- Restful API – <u>User Guide</u>
- Data Repository Solution – <u>User Guide</u>
- Subscription Service – <u>User Guide</u>

Users who are interested in limited amount of data can directly use GUI export option. On the other hand, SFTP is suitable for bulk data downloads but data available on SFTP refresh once every hour. On the contrary, Restful API can serve for the ones who are interested in the most recent updates on data. But there are also some limitations apply to API requests in terms of the number of requests per minute, the number of files to be downloaded per request and the time window allowed for queries depending on the data item of interest. The last option, Data Repository Solution allows download up to 50 MB. Requests are processed in the background, asynchronously, without imposing a load on the platform through a preferred channel for communication (Web service or ECP). Finally, the platform allows users to subscribe for a data feed in which the platform pushes updates to the user's endpoint through a web service or ECP channel.

Table 1. Overview of Download Options

Download Option	File Type	Data Updates
Web GUI	xml, csv, xlsx	Almost real time
SFTP	csv	Every hour
Restful API	xml	Almost real time
Data Repository	xml (zipped)	Almost real time
Subscriptions	xml	Almost real time

<u>**Conditions for Use of Transparency Platform Data**</u>

Conditions for use of TP data is defined by the <u>Terms and Conditions</u> within a dedicated section as follows:

"In accordance with the applicable legislation, the Data User shall, when using of the Transparency Platform Data for any purpose whatsoever:

- Use the Transparency Platform Data in good faith and always comply with good business practices regarding the re-use of publicly available data;
- Mention the ENTSO-E Transparency Platform as the source of publication of the data, in accordance with good industry practices and comply with all reasonable requests from ENTSO-E regarding the visibility of the ENTSO-E Transparency Platform origin of the re-used Transparency Platform Data;
- Be only allowed to make reference to the ENTSO-E Transparency Platform as the source of publication of the re-used data. It is therefore expressly prohibited to use the ENTSO-E Transparency Platform name or the ENTSO-E name in any manner that is likely to

cause confusion regarding the possible existence of any kind of sponsorship or of endorsement of any use of the Transparency Platform Data by the Data User;

- Not cause prejudice to the copyright or related right on a Transparency Platform Data, which may be owned by the concerned Primary Owner of Data. In case of a risk to cause prejudice to said right, the Data User shall seek the prior agreement of the holder of the copyright or related right. Notwithstanding this requirement, as a facilitation for the Data User, ENTSO-E publishes on the Transparency Platform and regularly updates the list of the Transparency Platform Data which can be freely re-used with no need to seek for the prior agreement of the respective Primary Owner of Data. The Data User has responsibility to check this list before each re-use of the Transparency Platform Data."
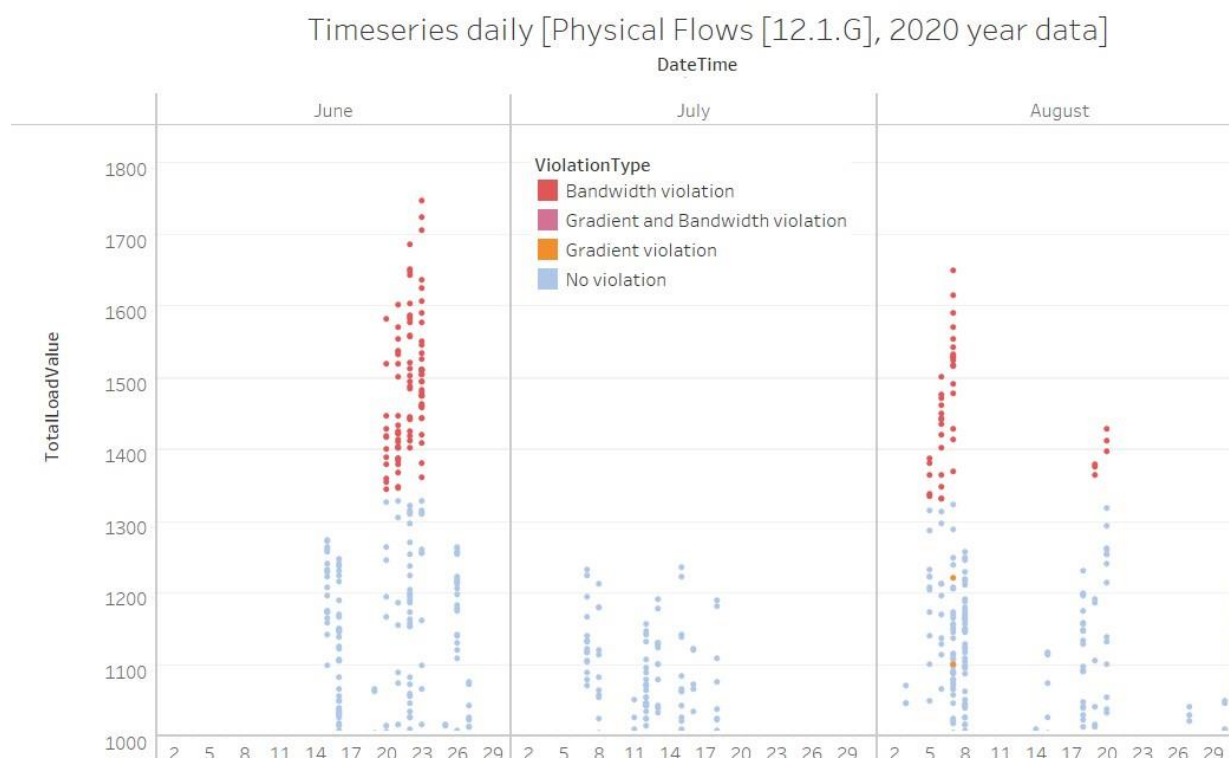
Already developed methodology to detect outliers

In 2018, ENTSO-E members entered into a Memorandum of Understanding (MoU) that establishes requirements for the quality of the data provided by TSOs
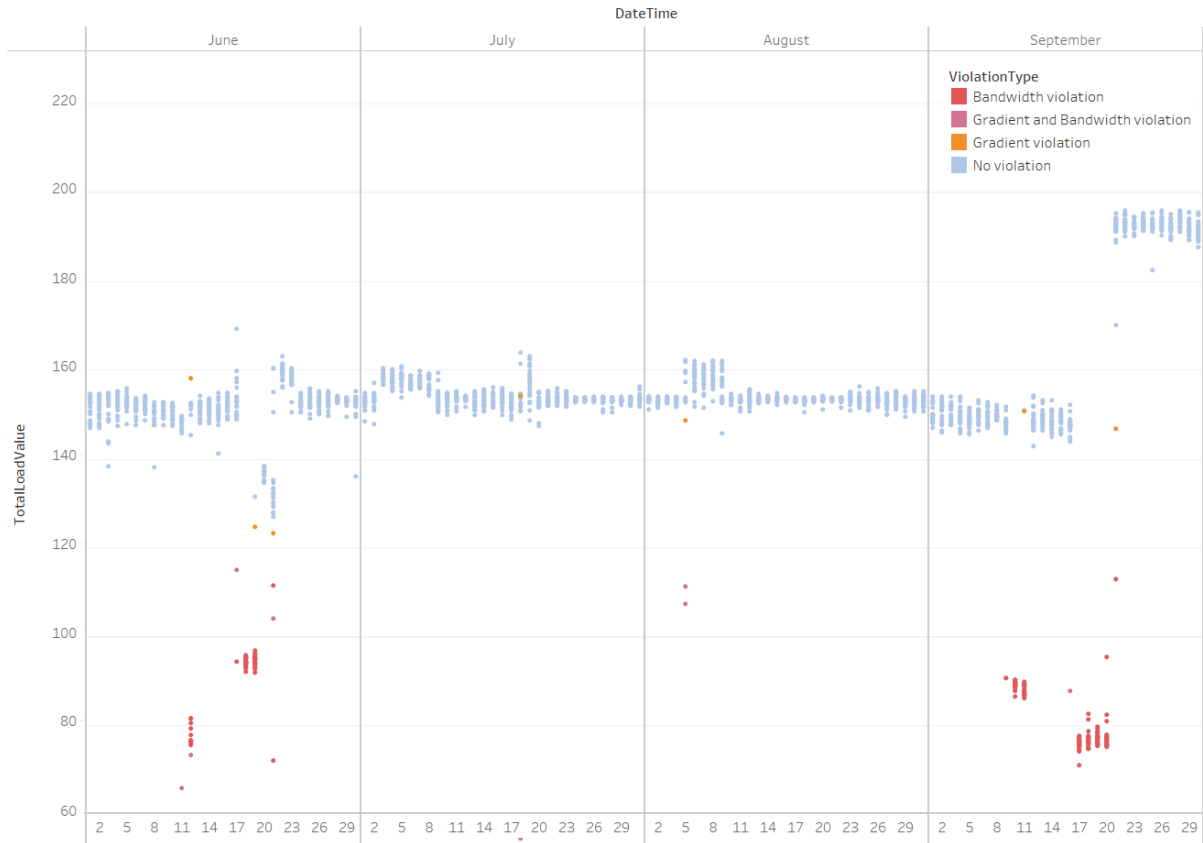
The initial proof of concept (PoC) done for Actual Total Load [6.1.A] Data Item has resulted in acceptable quality analysis results based on the Median Absolute Deviation(MAD) technique (https://www.academia.edu/5324493/Detecting_outliers_Do_not_use_standard_deviation_aro und_the_mean_use_absolute_deviation_around_the_median). However, the further PoC extension for other Data Items has shown that the nature of their data is not always suitable for MAD analysis, an opportunity to apply new techniques (e.g. machine learning) arise.

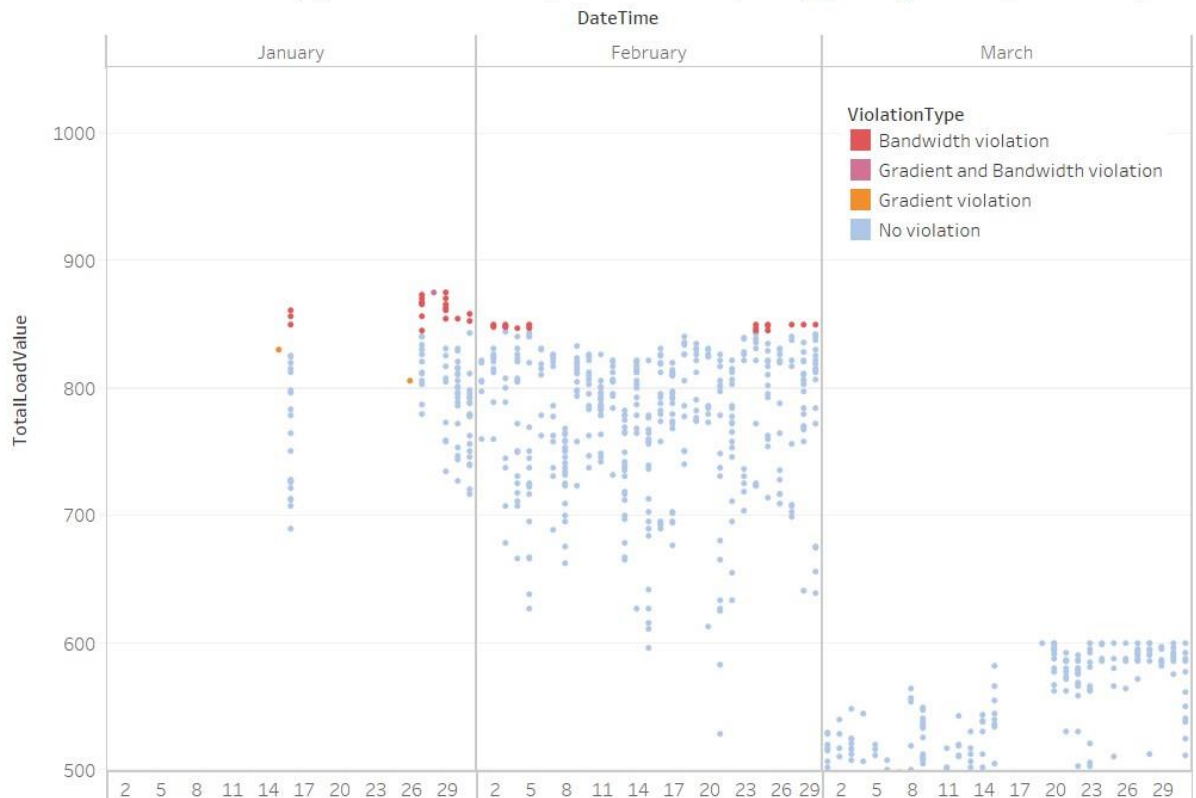Some more concrete examples where MAD technique didn't show promising results:

Detected anomalies (mostly false positives) are marked in red:

Timeseries daily [Physical Flows [12.1.G], 2020 year data]

Timeseries daily [Physical Flows [12.1.G], 2020 year data]

Timeseries daily [Offered Intraday Transfer Capacity [11.1], 2020 year data]

Third Parties benefit from getting involved in the scenario

The applicants will have the chance to be part of the growing collaboration among TSOs-DSOs-Consumers by providing data services. The applicants will also achieve a good knowledge of the developing concepts and infrastructures in that field to better address their services with the growing market needs.

Incorporation of Third Parties for network operators and household consumers

The expected services and tools for data quality measurements will ensure that the exchanged data among players has high quality standards. It is very important for network operators to have a precise information before taking any data driven actions. The developed services and tools can help eliminating that risk. Moreover, also from the household consumers' perspective, data quality checks will help avoiding any negative financial outcomes resulting from the non-realistic commitments due to unintended exchange of incorrect data.

Added value on OneNet project

As the energy markets evolves and develops, we are having more and more different types of players in the grid. The number of players and the frequency of interaction among them increase very sharply with the growing share of distributed energy systems. These developments also challenge the grid operators from the operational point of view. Therefore, it is very crucial to have an effective communication among the increasing number of stakeholders. The services and tools to be developed under this scenario aims to address the need of data quality measurements to maintain high data quality standards among the players in order to eliminate any misleading information. Quality measurements will be performed regularly at the desired frequency in order to identify the suspicious exchanges and corresponding parties will be informed.

Annex 7
Scenario No 7. : Third Party providing access to the Polish Balancing Market for prequalified Flexibility Service Providers

Cluster/ Demo area

Eastern Cluster/ Polish demonstration area

Type of service:

This scenario is for Third Parties, which:

1)   have an agreement with TSO, have the status of an active Balancing Market Participant and have an appropriate Scheduling Unit in which resources located in the distribution network can be mapped, offering balancing services for TSO (balancing capacity and / or balancing energy) via the Flexibility Platform,
and:

2)   have an agreement with TSO, have the status of an active Balancing Market Participant and have an appropriate Balancing Unit in which resources located in the distribution network can be mapped, offering balancing services for TSO (balancing capacity and / or balancing energy) via the Flexibility Platform.

Explanation:

In order to effectively conduct a demonstration in the Polish East Cluster demonstrator, in the scope of providing balancing services to TSO on the Balancing Market in Poland by resources located in the distribution network (in the DSO's grid), it is necessary to represent these resources on the Balancing Market by an active Balancing Market Participant. These resources may be represented within the existing or newly created Scheduling Unit. The Balancing Market Participant will submit offers for balancing capacity and / or balancing energy to the Balancing Market, as well as submit work schedules for these resources and provide settlements with TSO and Flexibility Service Providers. Additionally, for such a Scheduling Unit it is necessary to ensure balancing by an active Balancing Market Participant within the Balancing Unit corresponding to the Scheduling Unit.

Representation of flexibility resources connected to the DSO network on the Balancing Market by a Balancing Market Participant requires an active contract with TSO and compliance with a number of formal requirements including, for example, set up a financial guarantee for the proper performance of the contract in the field of settlements (currently in the amount not lower than PLN 500,000.00), and undergo an appropriate qualification test process as well as incurring expenses for the creation or appropriate adjustment of the appropriate Scheduling Unit and the Balancing Unit, and incurring the costs of its maintenance.

Such a Balancing Market Participant - the Balancing Service Provider takes full responsibility for submitting offers for balancing services (capacity and/or energy) and reporting work schedules made for such resources under a given Scheduling Unit to TSO, in particular is obliged to make appropriate settlements with TSO, including penalties for non-performance or improper performance of the contract for a given scheduling unit. The Balancing Market Participant is also responsible for any possible imbalance of such a Scheduling Unit, therefore it should ensure its balancing within the corresponding Balancing Unit.

Concluding, a contract with TSO and obtaining the status of a Balancing Market Participant by every FSP located in the DSO network, which intends to provide balancing services to TSO is too expensive and time-consuming and would lead to an unjustified increase in the number of Market Participants.

"Terms and Conditions related to Balancing" in Poland and unbundling rules make it impossible for DSO to play such a role of intermediation, and even more so by TSO, it is therefore necessary for the demonstration to acquire a Third Party, which is currently a Balancing Market Participant.

It is reasonable to select an entity, preferably one that already has the status of a Balancing Market Participant, who would be responsible for submitting balancing service offers (in terms of balancing power and energy) for appropriate remuneration under the existing or newly created Scheduling Unit on the Balancing Market, submitting work schedules for resources located in the DSO network and ensuring the balancing of such a Scheduling Unit within the corresponding Balancing Unit.

Since participation in the Balancing Market in Poland is associated with the need to use dedicated IT systems specified by TSO, a large part of the Balancing Market Participants use the services of Scheduling Agent who maintain appropriate systems for communication with TSO and on behalf of the Balancing Market Participants send notifications and schedules on the Balancing Market. Therefore, if a Balancing Market Participant who undertakes to submit to the Balancing Market offers of flexibility service providers (FSPs) located in the distribution network or for balancing a Scheduling Unit, in which the above-mentioned suppliers, will not have the appropriate ICT infrastructure, such Balancing Market Participant will have to have an appropriate contract with the Scheduling Agent, and any possible costs of using the services of the Scheduling Agent will be covered in the remuneration.

Therefore, in order to enable the actual submission of offers for balancing services (balancing capacity and/or balancing energy) to the Balancing Market in Poland, it is necessary to obtain the following types of services through the resources located in the distribution network:

1)   services for the submission of offers for balancing services and balancing energy and submission of work schedules for resources located in the DSO network within a given Scheduling Unit, as well as conducting settlements on this account by an active Balancing Market Participant (Balancing Service Provider) with an active contract for the provision of services transfer from TSO and
2)   balancing services of the Scheduling Unit referred to in point 1) above by an active Balancing Market Participant (Balancing Responsibility Party) with an active contract with TSO.

The purchase of the services described in point **above is required to demonstrate the possibility of providing balancing services to TSO by prequalified FSP located in the DSO network, described in BUC Balancing (EACL-PL-02)**.

Explanation:

The above results from the specificity of the Balancing Market in Poland, in particular from the need to meet a number of formal and technical requirements by the entities submitting offers for balancing services used by TSO under the rules described in the Terms and Conditions related to Balancing.

The above rules require intermediation in the transfer of the original Flexibility Service Providers' offers for balancing services to the Balancing Market. There are two possible solutions:

1)   each FSP prequalified for balancing services selects its Balancing Market Participant, which has a concluded and active relevant agreement (contract) with TSO and is equipped with an appropriate IT system for communication with the TSO or uses the services of an appropriate Scheduling Agent,
2)   for all FSPs prequalified for balancing services and submitting offers for balancing services through the Flexibility Platform, one Balancing Market Participant is selected, which

has a concluded and active relevant agreement (contract) with TSO and is equipped an appropriate IT system for communication with the TSO or uses the services of appropriate Scheduling Agent.

Technical details:

The FSPs prequalified for balancing services will submit their bids on the Flexibility Platform.

After the verification and optimization of the offers, the Flexibility Platform will forward the offers to the Balancing Market Participant (or Participants) in the form of a flat file in a predefined format (e.g. csv). The Balancing Market Participant will provide (independently or through a cooperating Scheduling Agent) data for a dedicated Scheduling Unit / Balancing Unit using dedicated TSO systems.

Data will be exchanged also between the FSPs prequalified for balancing services and the Balancing Market Participant outside the Flexibility Platform (on the set-points and appropriate instructions in the event of using the balancing services by TSO).

Addressed to:

The scenario is for parties being Balancing Market Participants active on the Balancing Market in Poland, who are able to handle additional balancing services offers from prequalified FSPs (submitted via the flexibility platform), including taking financial responsibility for settlements in this respect.

Therefore, these entities should have appropriate competences, experience and financial strength to be able to handle additional balancing services offers from prequalified FSPs located in the DSO network.

Explanation:

The answer to the Call for the provision of services described above may theoretically be submitted by any entity that is able to obtain the status of an active Balancing Market Participant by the date of the beginning of the demonstration period, create an appropriate Scheduling Unit and Balancing Unit and set up IT systems allowing for the submission of offers and work schedules on Balancing Market or conclude a service contract with the relevant Scheduling Agent.

However, due to the quite demanding process of obtaining the status of a Balancing Market Participant, including in particular: the need to have an appropriate license issued by the NRA, the need to conclude a contract with TSO for the provision of balancing services, including the need to establish a financial guarantee for the proper performance of the contract , the necessity to incur the costs of establishing the appropriate Scheduling and Balancing Units, and the need to set up IT systems necessary for their proper operation, it is advisable that potential contractors who respond to this scenario are already active Balancing Market Participants.

Description of the scenario

Initiative:

The potential service provider (Balancing Market Participant) will undertake to submit, on his behalf and under his own responsibility for balancing offers and work schedules for individual prequalified FSPs represented in a proper Scheduling unit and to make settlements on this account with TSO and individual FSPs as well as for balancing any possible imbalances on such Unit in the corresponding Balancing Unit.

Workflow:

- FSPs being prequalified balancing service providers whose resources are located in the DSO network will be able to submit their offers to the Flexibility Platform,
- on the Flexibility Platform, the offers of balancing services will be verified in terms of their technical feasibility and optimized,
- bids that are not rejected will be forwarded to the selected Balancing Market Participant which, as a part of the Scheduling Unit served, will submit them to the Balancing Market, taking full responsibility for them towards TSO,
- if Balancing Market Participant does not have appropriate IT systems, the offers will be forwarded to Scheduling Agent (chosen and paid by Balancing Market Participant), which will submit them to the Balancing Market on its behalf,
- the selection of offers will be made on the Balancing Market according to the rules described in the *Terms and Conditions related to Balancing* ,
- if the offer of a given FSP, submitted via the Balancing Market Participant, is selected on the Balancing Market, there will be settlements between TSO and a given Balancing Market Participant according to the rules specified in the *Terms and Conditions related to Balancing*,
- the settlements between TSO and Balancing Market Participant will imply settlements between Balancing Market Participant and a given FSP, whose offer made via the Flexibility Platform and Balancing Market Participant was selected on Balancing Market.

Expected outcome:

Offers for balancing services, submitted by prequalified FSPs participating in the Polish Demo / East cluster through the Flexibility Platform, after their verification and optimization on the Flexibility Platform, will be effectively transferred by the Balancing Market Participant (directly or through the cooperating Scheduling Agent) to the Balancing Market, where they can be selected for implementation on the terms specified in the *Terms and Conditions related to Balancing*.

Any imbalance on the Scheduling Unit, in which flexibility resources will be reflected, will be balanced within the corresponding Balancing Unit operated by the same or by a cooperating Balancing Market Participant.

Important information for applicants

Potential contractors should in particular:

1) hold a relevant license issued by the PL NRA,
2) have a contract concluded with PL TSO and have the status of an active Polish Balancing Market Participant,
3) have appropriate technical resources,
4) have financial resources to handle notifications,
5) be aware of the risk of additional settlements with TSO for non-performance of services by FSP and/or any imbalance on the Scheduling Unit,
6) register on Flexibility Platform (after being selected) and should proceed according to BUCs EACL-PL-02 and EACL-PL-04.
7) represent all prequalified FSP submitting offers for balancing services via the Flexibility Platform
8) offer the services for at least 6 months within the Polish demonstration period.

Third Parties benefit from getting involved in the scenario
Third Parties (Balancing Market Participants) will be entitled to remuneration for the provision their services.

The remuneration due to Balancing Market Participant should cover all costs related to the submission of offers to the Balancing Market (including costs, if any, Scheduling Agent, covering imbalance, etc.).

The Balancing Market Participant will have an opportunity to test new solutions and explore the potential of a new customer segment for which it may become a frontier on the Balancing Market.

Incorporation of Third Parties for network operators and household consumers

The involvement of a third party Balancing Market Participant in the OneNet project may create an opportunity to test a new segment of activity for this type of entities.

Ultimately, a Balancing Market Participants may attract a significant number of new users, such as service providers, aggregators including SMEs and Start-ups, etc., which is in line with the call expectations. For this purpose, a cascading funding mechanism is used, which reduces the barriers to participate in EU projects.

Testing such solutions may attract other Balancing Market Participants to searching for FSPs and / or their aggregators and including them in the operated Scheduling Unit for offering balancing services (balancing capacity and balancing energy). That may cause expansion the Balancing Market area.

Added value on OneNet project

Without the participation of Balancing Market Participant it will not be possible to extend a demonstration under the East Cluster regarding the provision of balancing services by prequalified FSP to Balancing Market (under the *Terms and Conditions related to Balancing*).