

PERSEO CHALLENGE REGULATIONS

1. Background to the challenge

Iberdrola has more than 400,000 Transformer Centers (TC) in the United States, Brazil, United Kingdom and Spain. These Centers house more than 1.5 million medium to low voltage distribution transformers, built and operated to provide a high quality and reliable service to a total of 31 million electricity supply points.

As the electricity supplier and network operators across Spain, US, UK and Brazil; underground cables have been widely used by Iberdrola Group.

To meet the expectations of our communities to minimise the virtual impacts, and to reduce the associated time to connect our customers and renewable resources, cables at both transmission level (from 132kV and above) and distribution (66kV, 33kV, 11kV and 400 Volts) have been commonly deployed across our networks.

However, those cables have been commissioned over the past several decades, from different suppliers and different types to support the gradual development of the electricity networks due to the nature of our sector. Most of distribution cables have no condition-monitoring facilities when they were constructed. Cables are often jointed at different lengths, and those cable-joints can be the weakest points along the whole route.

2. Description of the challenge

In this context, Iberdrola, through its PERSEO Startups Program, is looking **for solutions that enable the early detection of incidents in underground cables (with particular attention on cable joints) through advanced and non-intrusive condition monitoring approach**, with the aim of enabling the proactive asset management and reducing the impact of incidents on supply and on our customers.

We encourage and welcome any approach from other sectors (such as Oil/Gas, Telecomm or Military). This topic has been noticed by the industry for a while. So far, the most common condition monitoring system is based on Partial Discharge (PD). Anticipating most of correspondences might be on PD approach. It might be useful for us to share the lessons learned:

- While PD is a proven technology, applying it to our cable network is a difficult task.
- The most accurate cable PD results are possible using offline testing – however this requires an outage (difficult / expensive)
- Online PD monitoring is an alternative and we did BAU trials in SPM – however the Conclusions were that distribution networks are vast, have multiple and varied loads creating noise on the waveforms
- Without the possibility of burying new opt fibres along with the existing cables, how to bring the signal from the underground condition is another challenge.

In addition, consideration will be given to:

- The maturity, reliability and scalability of the solution, including hardware (sensors), and software/algorithm for both equipment management and data processing to generate warnings.
- Simplicity of installation (Plug&Play), maintenance and autonomy (low consumption/self-powered).
- Integration with current monitoring systems.
- The total cost, both initial and recurrent.
- Application in other energy assets such as substations and overhead lines.

The challenge is launched within the framework of the new **Global Smart Grids Innovation Hub**. Iberdrola will make the Hub a worldwide grid benchmark, through open collaboration and Co-Working between i-DE technicians, suppliers, Startups and different organizations from all around the world.

The team of experts from Iberdrola's Networks business will be responsible for selecting the solution or innovative solutions that enable the early identification of incidents at transformer centers.

3. Participants

Candidates taking part in this Challenge (the “**Participant/s**”) may be individuals or entities.

In either case, the Participants and/or team members must be at least 18 years old, be of legal age and have full legal capacity in the jurisdiction where they live.

If you take part in the Challenge through a team or a legal entity, the proposal must be presented by a representative who will be the only valid interlocutor during the Challenge and they will be empowered to represent the team and will be liable vis-à-vis the team or legal entity.

4. Overview

The Participant will submit the information to <https://connect.startus.cc/iberdrola-startup-challenge-monitoring-underground-cables/> in relation to the Challenge described in section 2 (collectively referred to as the “**Proposal**”).

Each Participant may submit one or more Proposals.

Participation in this Challenge does not give any protection regarding intellectual property rights against third parties. We recommend that Participants take steps to protect their intellectual property rights before submitting their Proposal.

By submitting the Proposal, the Participant agrees to this regulation and declares, under their own responsibility, that they are the owner of or have rights to use any intellectual property rights relating to the proposal and there are no conflicts of interest.

Perseo and/or the relevant Iberdrola group company reserve the right to reject any Proposals that do not comply with this regulation.

5. Prize

The prize will consist of us signing a collaboration and proof of concept agreement with Perseo and/or with any other relevant Iberdrola group company.

Perseo and/or the relevant company will:

- i. assume the costs of the collaboration and the proof of concept;
- ii. provide the winner with the necessary technical support to test the solution proposed, giving access to equipment, appliances, infrastructure, high technology sites and joint work areas; and
- iii. provide the winner with a real environment and real data to test the solution.

If the assay or proof of concept is satisfactory, Perseo and/or the relevant company, directly or indirectly through another Iberdrola group company, may offer the Participant the opportunity to scale up the solution by means of commercial agreements.

It will also be included directly in the **Global Smart Grids Innovation Hubs** registration process, as a collaborator able to benefit from the services, activities and resources that the GSGI Hub makes available.

Perseo may consider investing in the Participant and/or Challenge winner.

Winning the Challenge gives no rights other than the prize described.

Perseo may choose the winner according to its own criteria and may declare the competition void if none of the proposals fulfils its expectations.

6. Statements and guarantees:

By taking part in the Challenge, the Participant manifests and guarantees that:

1. The information contained in the Proposal presented is correct, reliable and complete.
2. The Participant holds all rights, including but not limited to all intellectual property rights and has obtained each and every consent, approval and licence necessary to present the Proposal and take part in the Challenge. No third party rights are infringed.
3. Perseo and/or the relevant Iberdrola group company do not need to verify the authenticity of the ownership of the rights over the Proposal and the exclusive responsibility for any problems arising from claims from any third parties that may arise rests with the Participants.
4. The Participant has not violated any laws to participate in the Challenge.
5. The Participant releases and exempts Iberdrola and/or the relevant Iberdrola group company and its subsidiaries, affiliates, employees and agents, from all responsibility for any injury, loss or damage of any kind derived from or related to the Proposal and the Participation in the Challenge.
6. The Participant has been notified of the zero tolerance to corruption by Iberdrola and complies and will comply with principles equivalent to those assumed by Iberdrola in its Code of Ethics, which is available at <https://www.iberdrola.com/corporate-governance/corporate-governance-system/purpose-values-code-ethics>.

7. Applications

Proposals will be submitted via <https://connect.startus.cc/iberdrola-startup-challenge-monitoring-underground-cables/> and must be written in Spanish or English.

Each Proposal must include:

- 1) General information:

- Participant data. If the participant is a team or a legal entity, the representative submitting the application must identify themselves as such and will include a certificate of their power of attorney to represent the team or legal entity.
- Link to the website (optional).
- Address (city, country).
- Contact information (contact person, job title, email, telephone number).

2) Description of the Proposal:

- Description of the solution in 50 characters.
- Presentation of the company/organisation.
- Demo or video link (optional).
- Maturity of the solution (R&D, proof of concept, entire commercial proposal).
- Preliminary investment and improvements in times and CAPEX
- Description of required construction activities (see above chapter 2: “Description of the Challenge”)
- Contractual agreements.
- Reference numbers.

3) A list of all the intellectual property rights owned by the Participant, granted to the Participant under licence and/or created by or on behalf of the Participant and included in the Proposal.

8. Schedule

Proposals must be submitted between **30/06/2023 at 00:00 GMT** and **31/08/2023 at 00:00 GMT**. All Participants will receive confirmation that their Proposals have been received. Any proposals received after this period will be rejected.

Proposals will be evaluated internally by Perseo and/or by employees of the relevant Iberdrola group company.

Perseo and/or the relevant Iberdrola group company may contact Participants at any time to request such additional information as they consider necessary.

Participants should send their questions and suggestions by email to: IberdrolaChallenge@iberdrola.es.

The evaluation process will end by **October 2023**, when Perseo will notify the winner.

Perseo will declare the competition void if none of the Proposals meet Iberdrola’s expectations.

After notifying the winner, Perseo and/or the relevant Iberdrola group company will publish the name and details of the winner, with a description of the winning Proposal and the reasons that it has been chosen, on the Iberdrola website and on Iberdrola group social networks.

9. Changes to the Regulation

Perseo may amend this regulation at any time and at its own discretion. This includes changes to the deadlines established, modifications to events, locations and specifications of the Challenge. Perseo will publish/notify participants of any changes to this regulation on the <https://www.iberdrola.com/innovation/international-startup-program-perseo/underground-cables-monitoring> website.

10. Cancellation, modification or suspension of the Challenge in case of irregularities

Perseo reserves the right to cancel, modify or suspend participation by unfair participants and/or the Challenge as a whole if it considers that a participant has cheated or has introduced a virus, worm, internet bot, etc., or if a catastrophic event occurs, or any other unforeseen or unexpected event that cannot reasonably be controlled or anticipated (also called force majeure) which may affect the impartiality and/or integrity of this Challenge.

Perseo and/or the Iberdrola group company may disqualify or prohibit participation of any unfair participant in any future competition.

11. Data protection

Inversiones Financieras Perseo, S.L., with registered address at Plaza Euskadi 5, Bilbao 48009, Spain, hereby informs that the personal data of the Participant included when registering the Proposal will be processed by Perseo as the data controller for the purpose of operating this Challenge.

The legal basis for processing the Participant's data is the Participant's consent, granted when the Participant registers for the Challenge and accepts this Regulation. The Participant has the right to withdraw the consent given at any time without this affecting the legality of the data processing by virtue of the consent granted by the Participant before it was withdrawn.

If, as a result of the participation by the Participant in the Challenge, the Participant provides personal data belonging to third parties, before submitting this personal data, the Participant must inform those third parties that their personal data will be processed in accordance with the aforementioned documentation.

The Participant's personal data will not be communicated to any third parties. This notwithstanding, the personal data will be made available to service providers in connection with the management of the platform <https://connect.startus.cc/iberdrola-startup-challenge-monitoring-underground-cables/>.

The personal data provided by the Participant will be stored for as long as needed to comply with the Challenge, as detailed above. Also:

- If the Proposal is not selected, the personal data will be deleted.
- If the Proposal is selected, the personal data processed by Inversiones Financieras Perseo, S.L. will be governed by the corresponding agreement.

However, the personal data provided may be kept, duly blocked, for the time required by law and the applicable regulations.

Perseo has implemented the necessary technical and organisational measures to protect Participants' data from accidental loss or unauthorised alteration, access, use or disclosure, and has also established procedures to react to any security incident that could affect Participants' data.

The Participant has the right to access their personal data being processed, as well as the right to request the rectification of incorrect data, or, where appropriate, request the deletion of their data when no longer necessary for the purposes for which they were obtained, and also has the

right to object to or limit the processing of their data. Participants may also withdraw their consent at any time.

Participants may also exercise their rights, free of charge, by writing to the data protection officer at perseo@iberdrola.es.

If the Participant is not satisfied after exercising their rights, they may submit a complaint to the Spanish Data Protection Agency.

12. Costs and taxes

Participants will assume any costs and taxes related to their participation in the Challenge and to their receipt of the prize, if applicable. It is recommended that Participants check the costs, charges and taxes applicable in the laws of the jurisdiction in which they reside or in which they are obliged to pay taxes.

13. Limitation of liability

Perseo or the relevant Iberdrola group company are not liable for problems related to computers, networks or any other problems that could cause the delay, loss or damage of any participation.

14. Translation of this Regulation

This Regulation has been drafted in English, Spanish and Portuguese. In case of any discrepancies between the original and the translation, the Spanish version will prevail.

15. Applicable law and jurisdiction

This Challenge and its regulations are governed by Spanish law. The courts of Madrid, Spain will have exclusive jurisdiction to settle any disputes.