

TECHHOUSE Guideline for Innovation Challenge Definition

1. Describe the challenge you are addressing in one sentence.

We want to identify meaningful IoT solutions for Austrian businesses that can be deployed on the country's first nationwide LoRaWAN network.

2. Describe the general environment of the challenge, the challenge itself in more detail and why finding a solution is important

The Austrian economy has large potential for increased digitalization and IoT products represent a significant share of this. However, a significant number of IoT projects fail. Austrian businesses, in particular small to medium enterprises, require plug and play solutions that solve **real** business problems to make their digital transformation successful. As a leading telecommunications company, it's important for Drei to make IoT work for business customers.

As part of this effort, Drei and SPL Tele will roll out Austria's only nationwide LoRaWAN network over the course of 2022, opening the possibility to connect thousands of IoT sensors across industries all over the country.

In conjunction with this rollout we are looking for new use cases and solutions that solve customer problems and unlock the potential of this new network infrastructure. A multitude of LoRa based sensors exist on the market, but how can these be utilised in a way that helps optimise resources, increase visibility of processes or improve customer experiences.

3. What is the potential impact of a solution to the problem you are facing?

- New innovative business models,
- Process efficiency for business customers,
- Increased competitiveness of Austrian businesses in an increasingly digitalized world.

4. What are the essential functionalities/capabilities that the solution has to meet?

In particular Drei is interested in solutions that:

- Can utilise the only Austria wide LoRaWAN network (i.e. problems that cannot easily be solved by establishing a private network)

- Is relevant for the market: clear evidence that businesses or market experts from the concerned industry have a need for the product (customer interviews; ideally feedback from 8-10 businesses)
- Offers a significant improvement compared to existing processes/experiences

5. Will there be a detailed technical briefing of the environment the solution has to operate in?

Preferably with a focus on LoRaWAN technology: applications where long-range communication with low data volume transmission and low energy consumption are required

Use with 5G would also be acceptable.

6. What resources (data sets, detailed current approach, unsuccessful preexisting approaches) can be made available to the participants?

- Mentoring on customer discovery process,
- Connectivity access during PoC challenge,
- Partnership with Drei in the event of successful project (co-marketing and sales opportunities)

7. What disciplines/background/capabilities are likely to be required to solve the challenge (this could also be an interdisciplinary combination of individuals)?

Technical background with the ability to empathise with customer problems/understanding of use cases

8. Would you like to promote potential approaches (technologies/devices), or is the chosen approach secondary to finding a solution to the problem?

Ideally the IoT solution will utilize the LoRaWAN communication protocol, although use of 5G communication would also be acceptable. Most important however, is that the IoT solution addresses a concrete business problem.