

SOFIE

Secure and Open Federation of IoT systems

An overview

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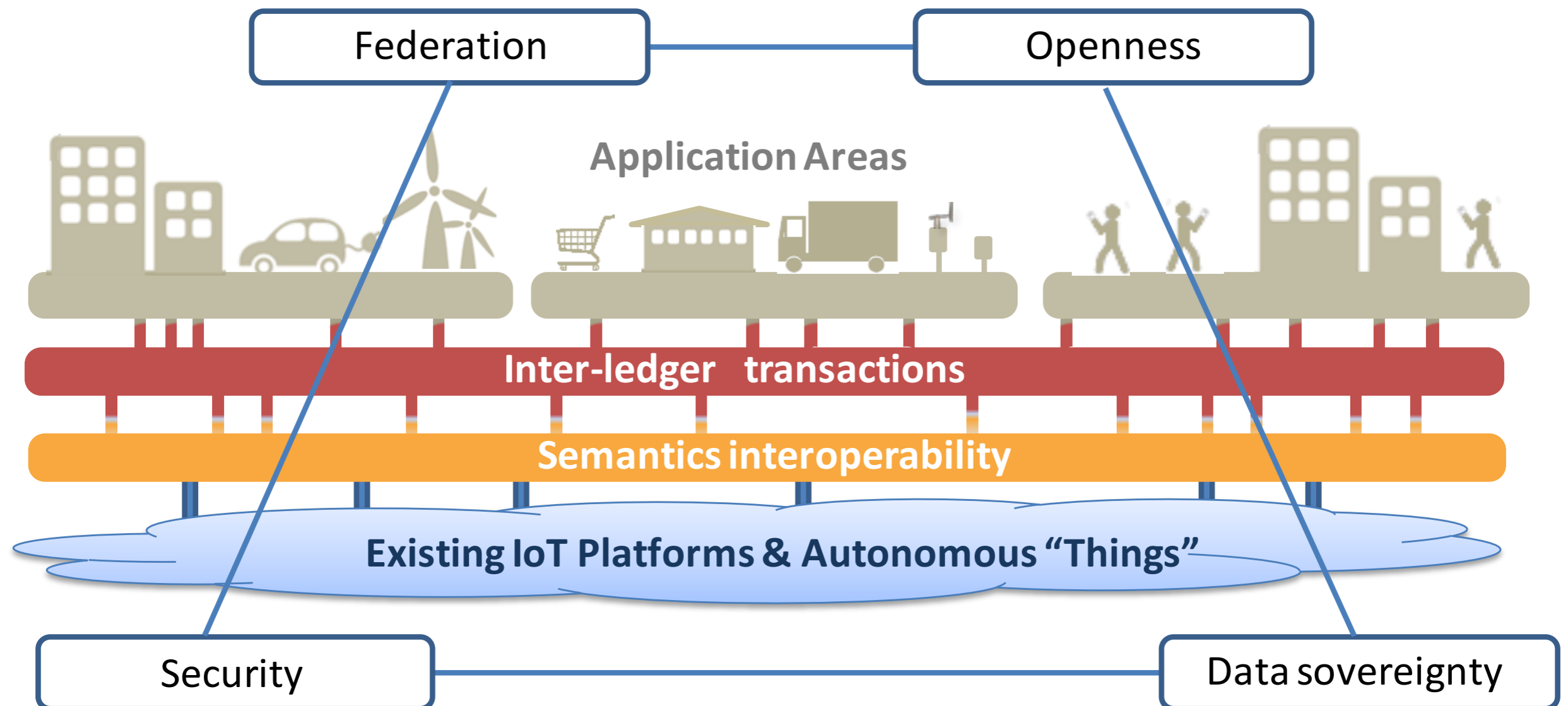
Outline

- Introduction and goals
- Core concept
- Project partners
- Technical approach
- Field trials
- Summary

Introduction and goals

- EU H2020 IoT-03 R&I project
- 3 years 2018–2020
- Key idea: Secure Open Federation, using DLTs
- Stated concrete objectives:
 - Define an IoT federation *architecture* and develop a corresponding *framework*
 - *Deploy and evaluate* the federation framework *in field trials*
 - Evaluate the *commercial viability*
 - Establish the IoT federation approach as *a major enabler*

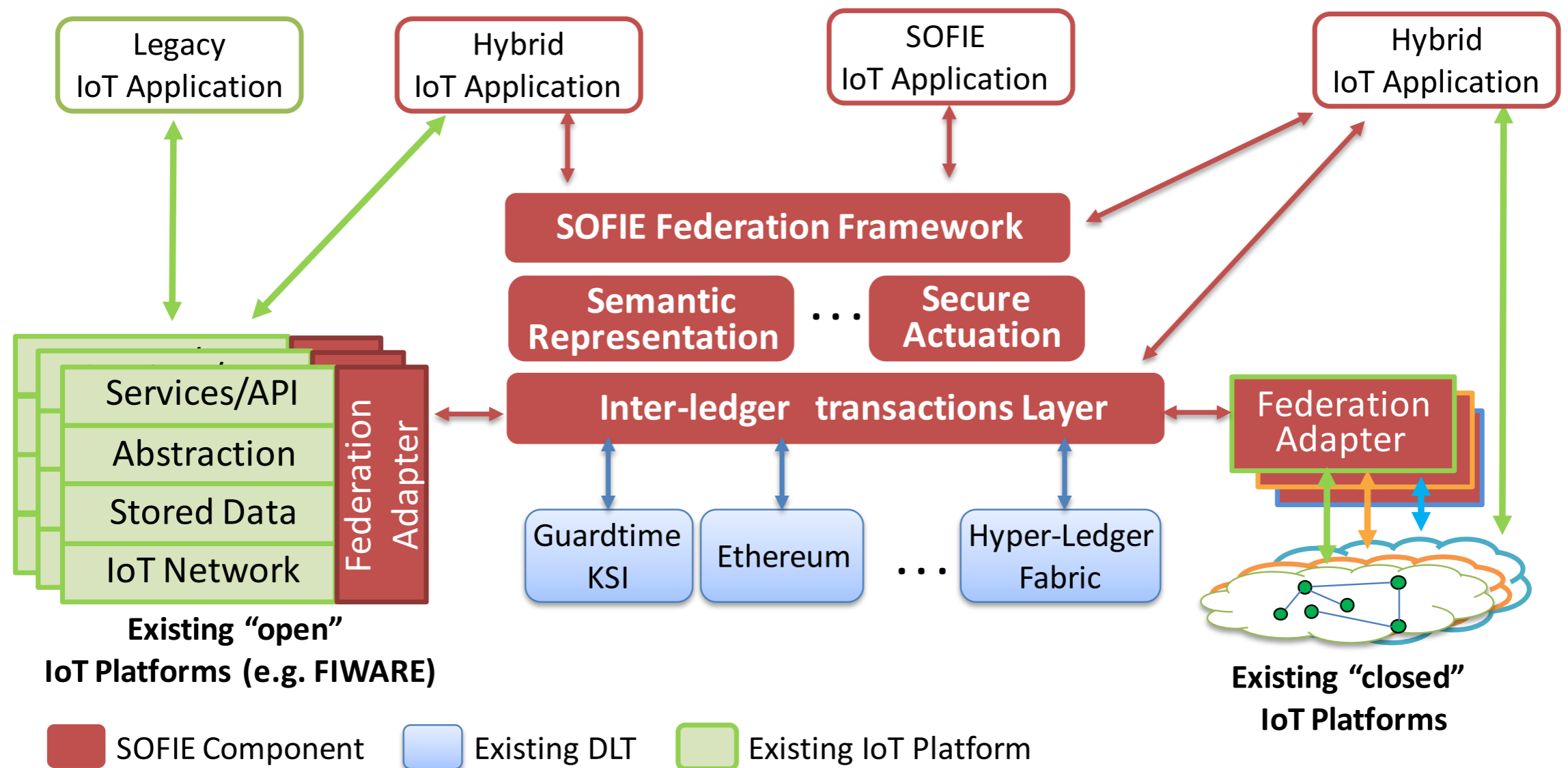
Core concept



Consortium

Participant	Country
Aalto University	Finland
Ericsson	Finland
Rovio	Finland
Guardtime	Estonia
AUEB	Greece
Synelixis	Greece
Optimum	Greece
Eng	Italy
Asm Terni Spa	Italy
Emotion Srl	Italy

Technical approach



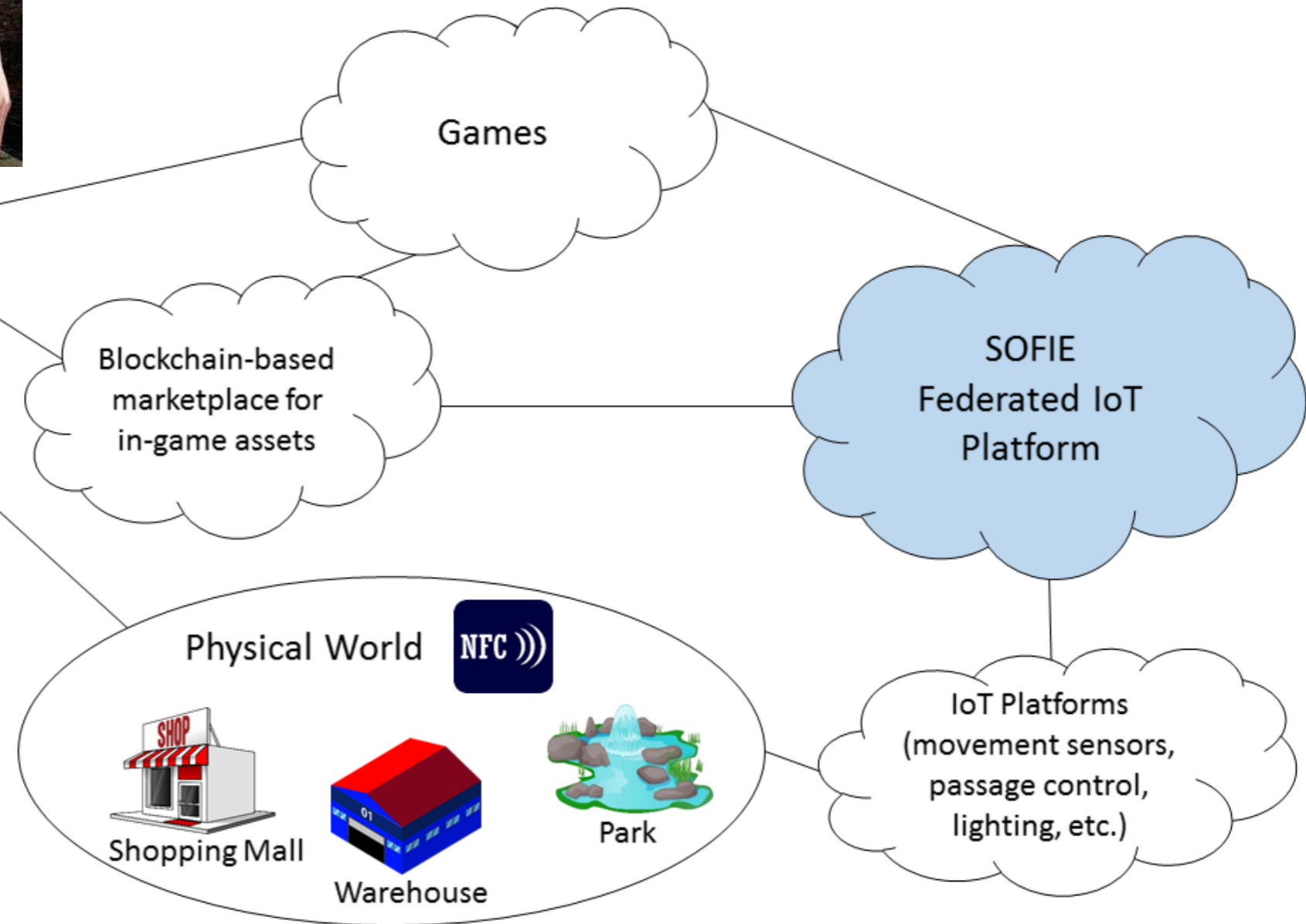
SOFIE field trials

- Mixed reality gaming
- Energy (2 partly federated trials)
- Food chain
- **Looking for additional external users / trials**

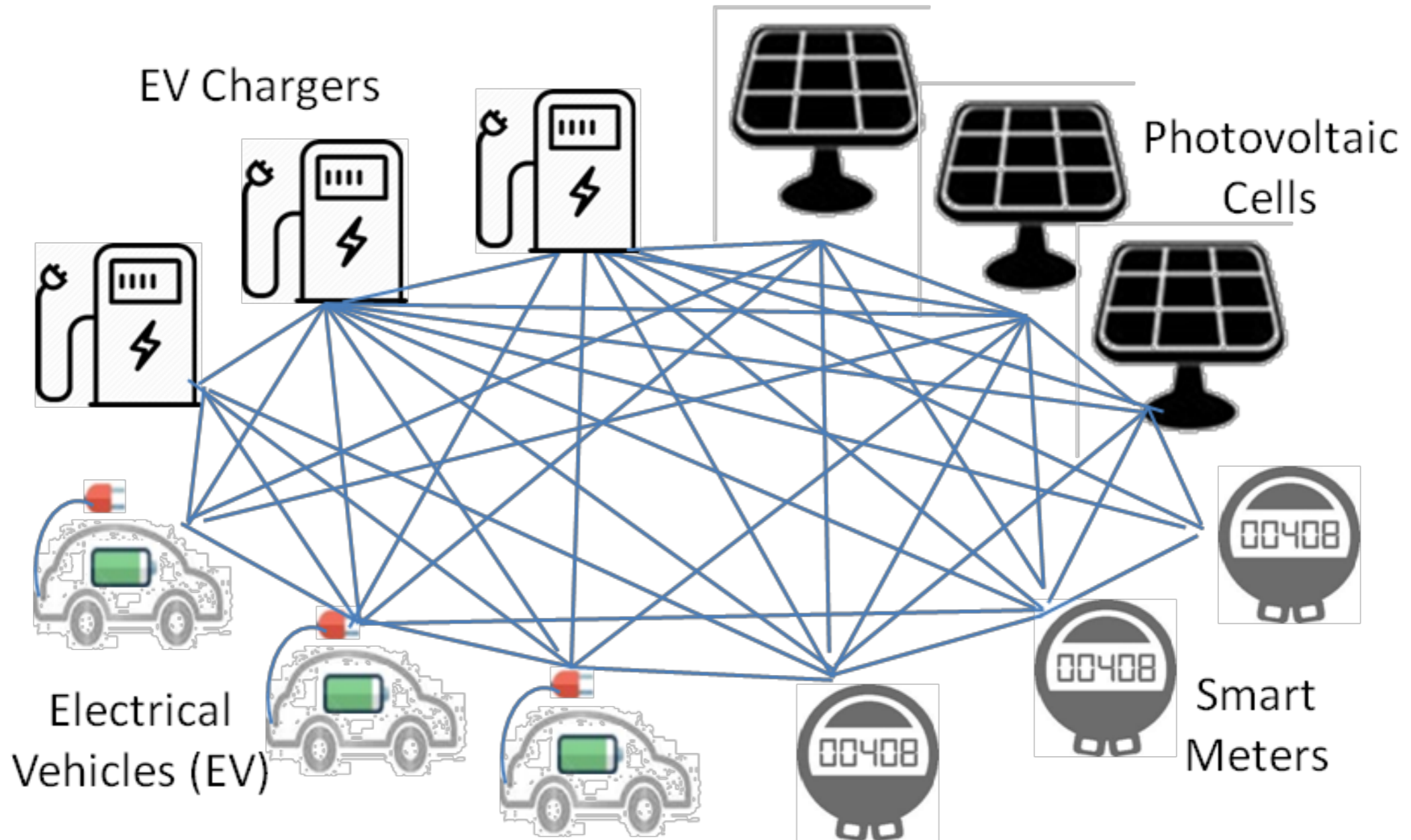
Mixed reality gaming



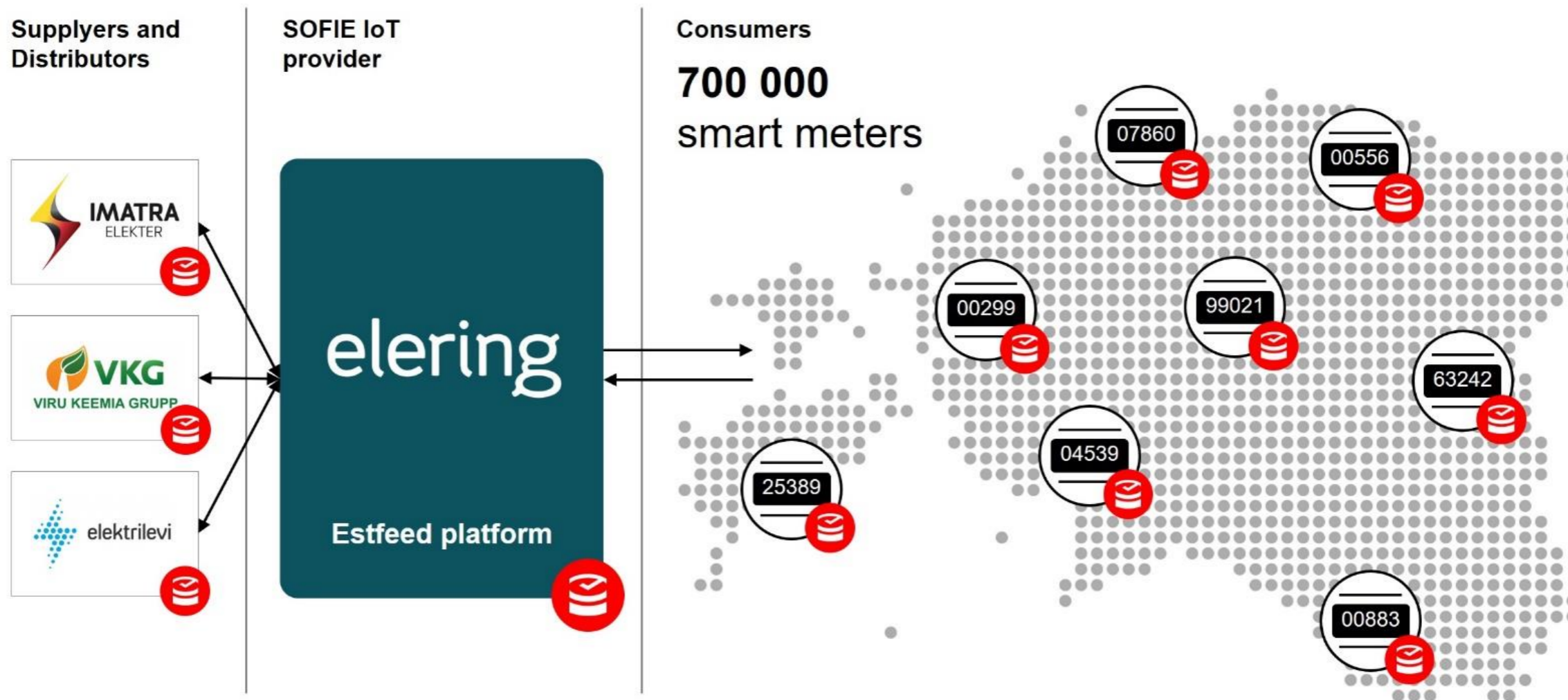
Gamers



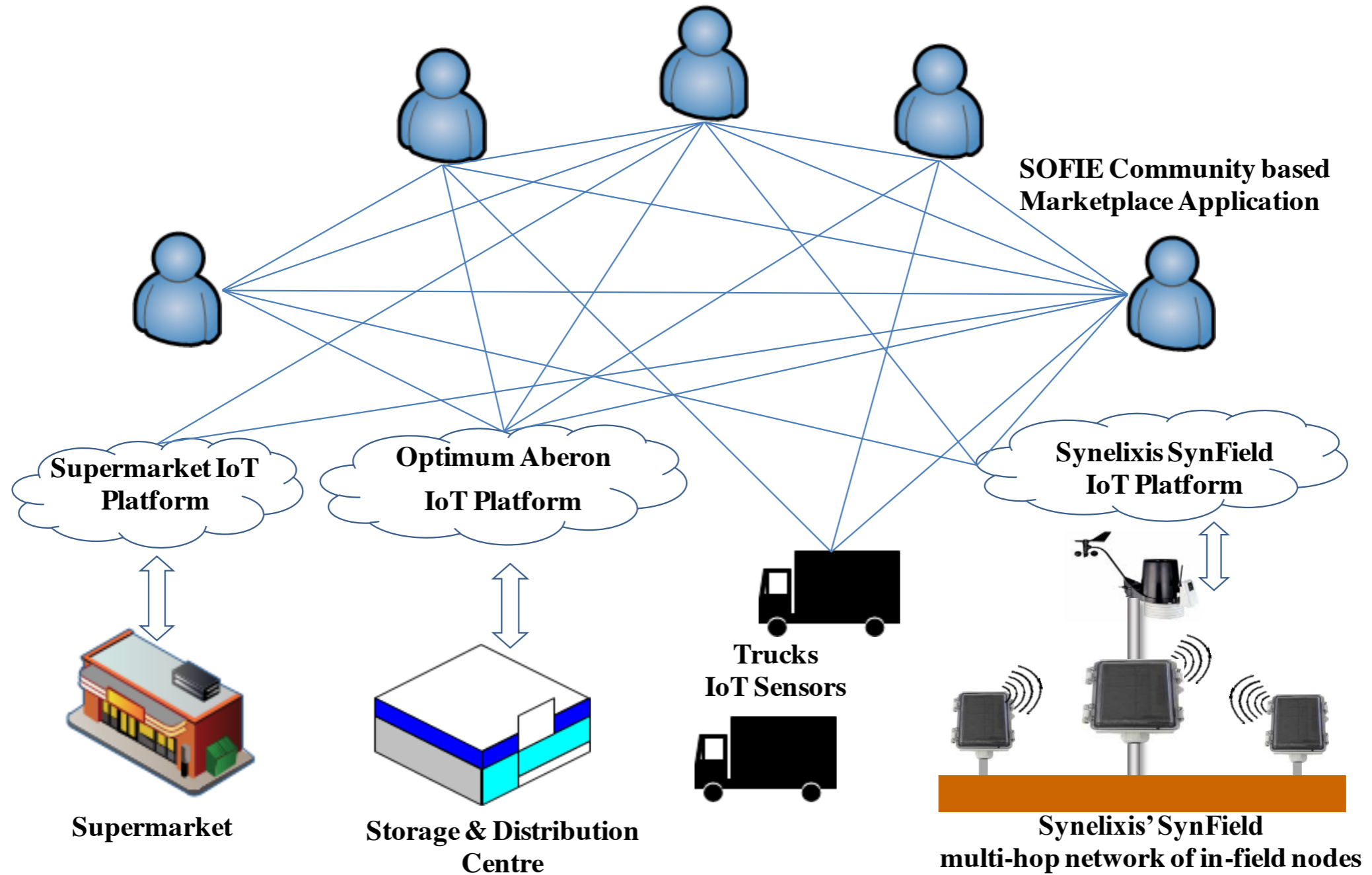
Energy: Terni



Energy: Estonia



Food chain



Reflection

- Not rocket science
 - Mostly novel integrating of existing components
- Security and privacy may be challenging
 - Especially end-to-end data security
 - Apparently lots of conflicting needs
- **Need community help to get the details right**

Summary

- H2020 IoT-03 R&I, 2018–2020, 4.5 M€, 10 partners
- Secure Open Federation of IoT platforms with DLTs
- Trial areas: Gaming, Energy, Food chain
- We are looking for
 - Community feedback (e.g. to our white paper)
 - New external trials / users (from mid 2018)