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# VIRTUAL ENERGY SYSTEM

## CREATING THE DATA SHARING INFRASTRUCTURE

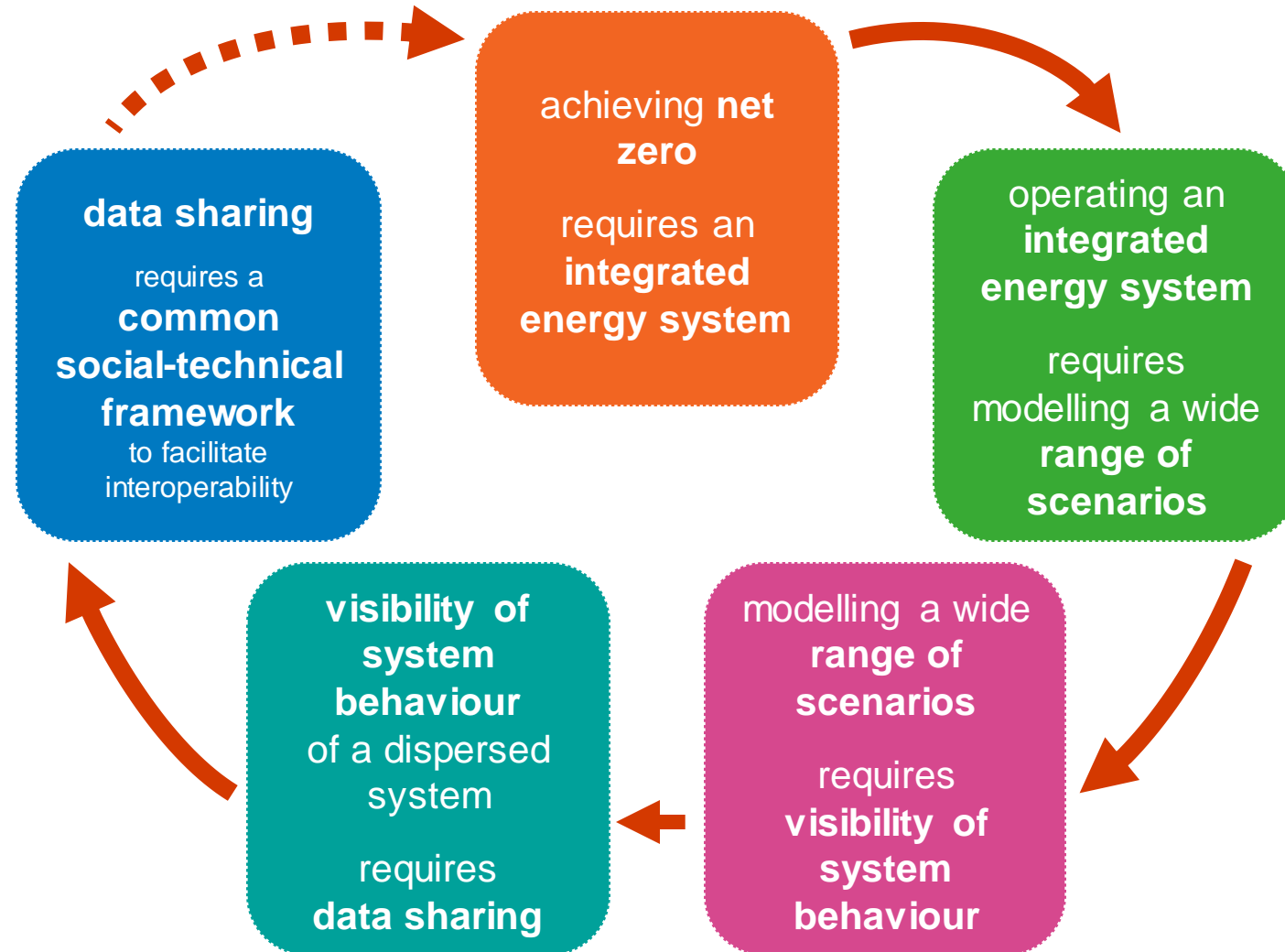
Gemini Call - November 2023



**Jonathan Barcroft**  
Workstream Manager, ESO

**ESO**

# THE CHALLENGE: THE ENERGY SYSTEM IS CHANGING



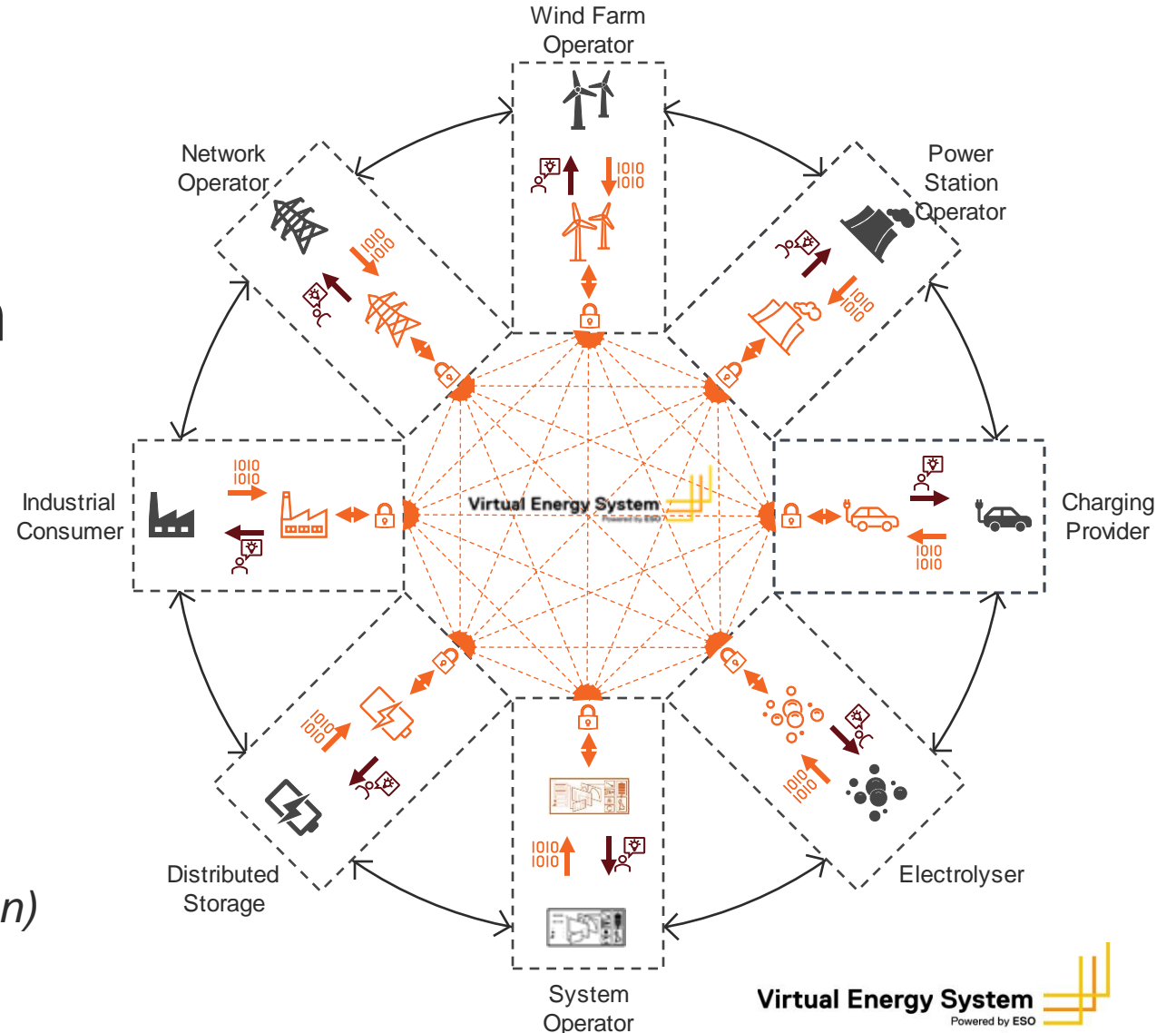
# THE SOLUTION: VIRTUAL ENERGY SYSTEM

## Ambitious objective:

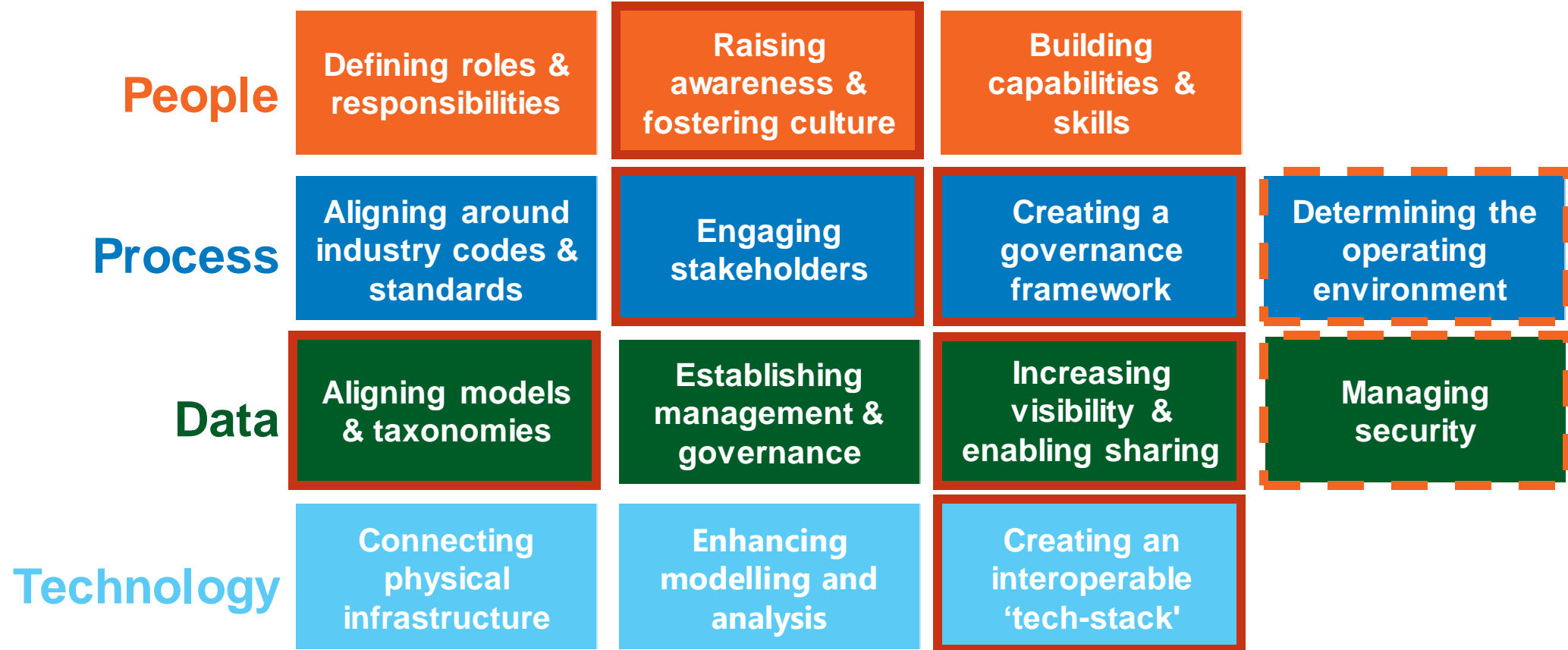
Creating the **data sharing infrastructure** to enable an ecosystem of **connected digital twins**

For the **entire GB energy system** to solve wider system challenges

*(e.g. energy optimisation, carbon reporting, investment planning, ...net zero energy transition)*



# WHAT NEEDS TO HAPPEN: COMMON FRAMEWORK

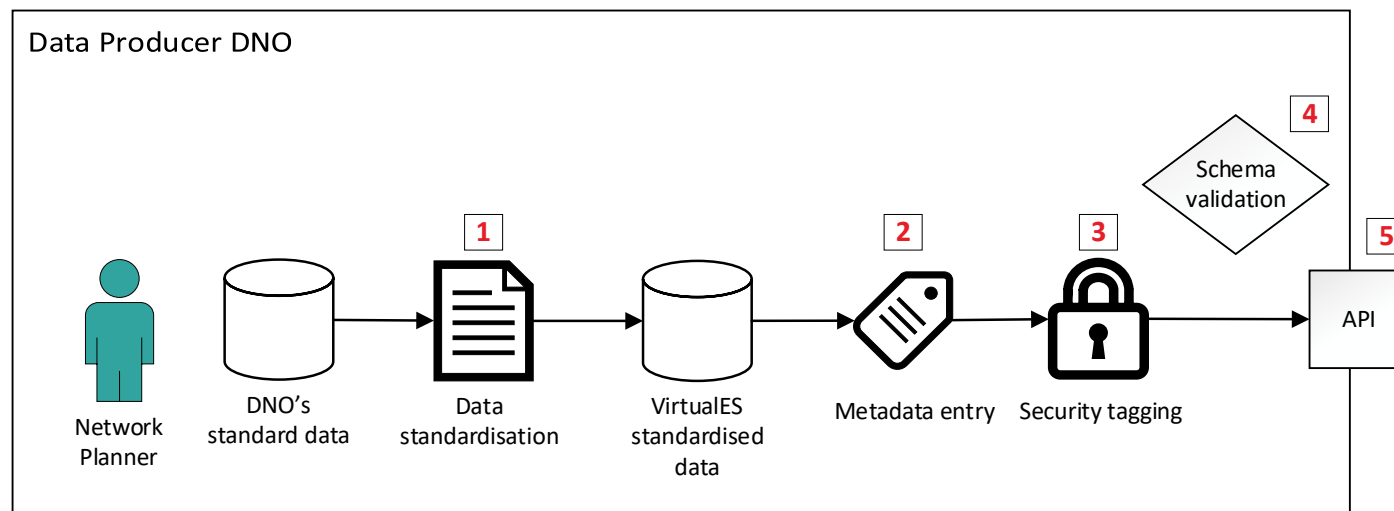


# USER JOURNEY



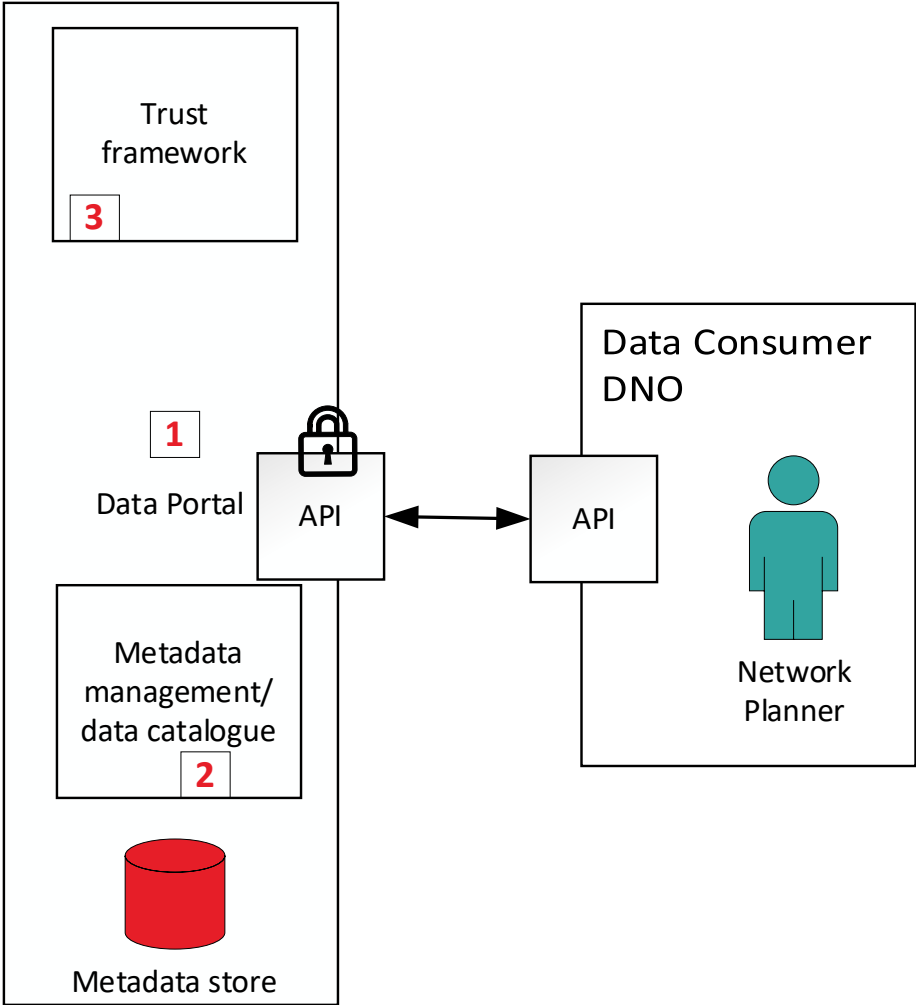
# 1 – PREPARE & 2 – PUBLISH

*Task Lead: Data Provider*



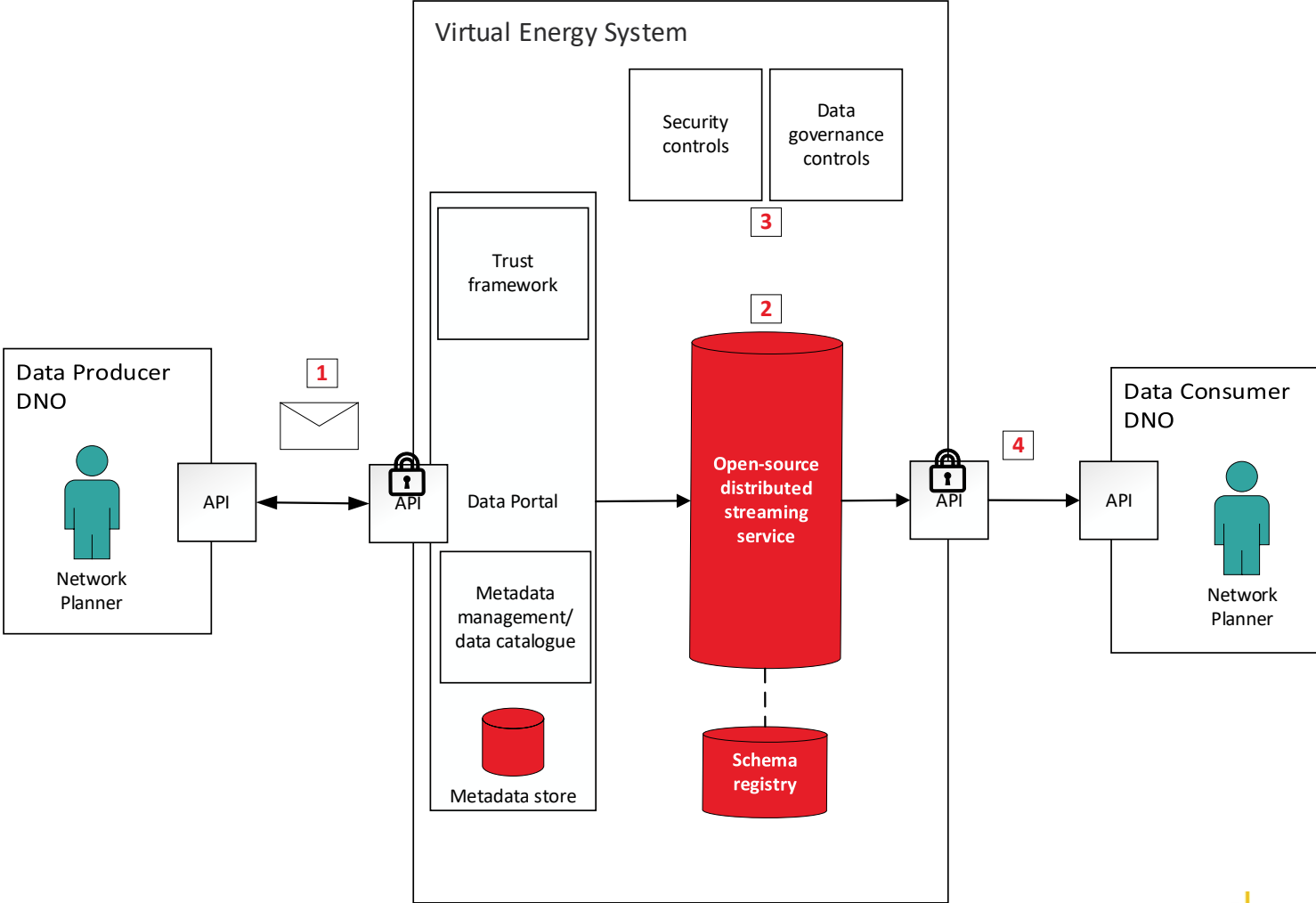
# 3 – SEARCH & 4 – REQUEST ACCESS

*Task Lead: Data Consumer*



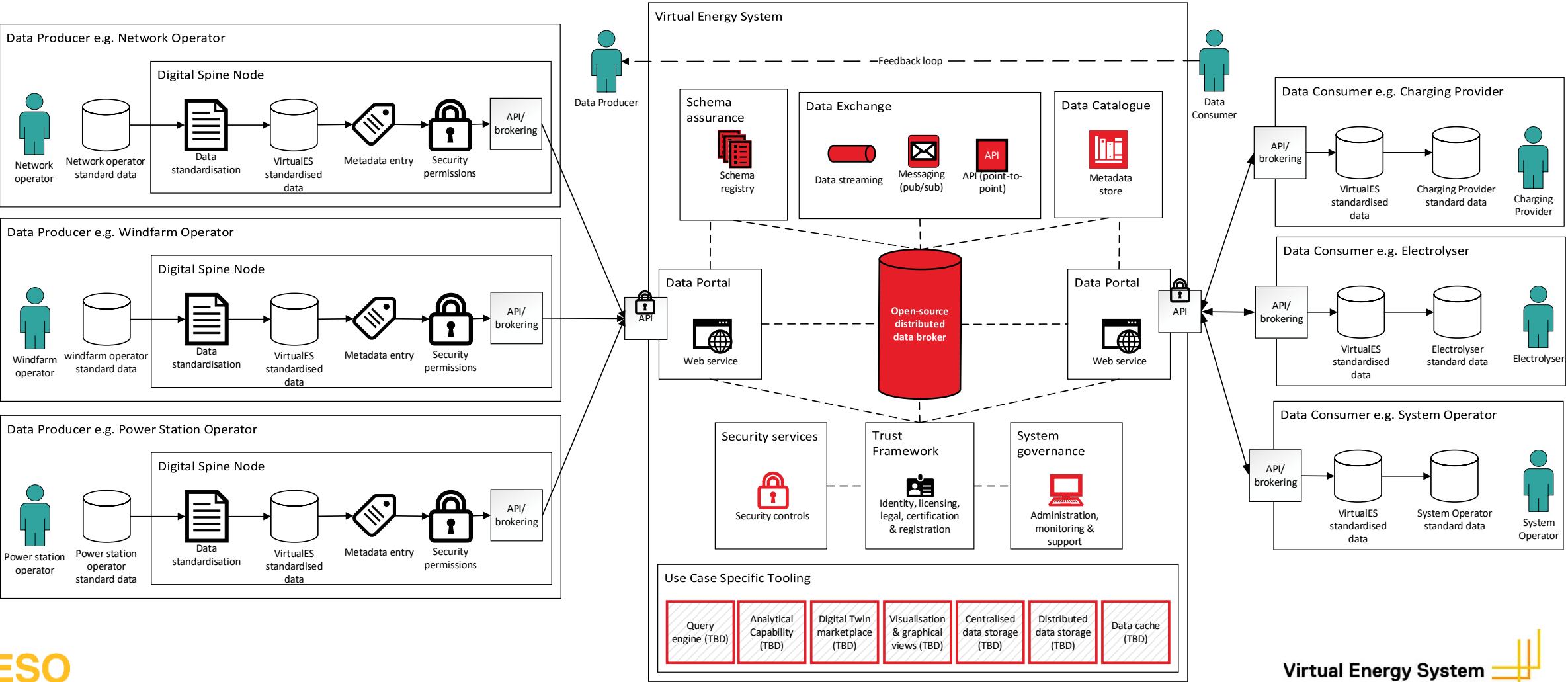
# 5 – REVIEW REQUEST & 6 – PROVIDE ACCESS

Task Lead: Data Provider





# HIGH LEVEL DESIGN



# Virtual Energy System

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