

Design Enablement Team

April 11th, 2025



**No
Digital
without
chips**



1. DET

Overview

Design Enablement Team (DET)

▶ Technical & operational services of the EU Design Platform

Snapshot

Need



DET

Prototype



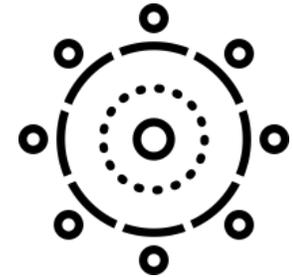
A fully integrated Chip design enabler to turn Idea & concept into prototype

Powered by a network of



Single entity
with track record

or



Consortium
Covering the supply chain

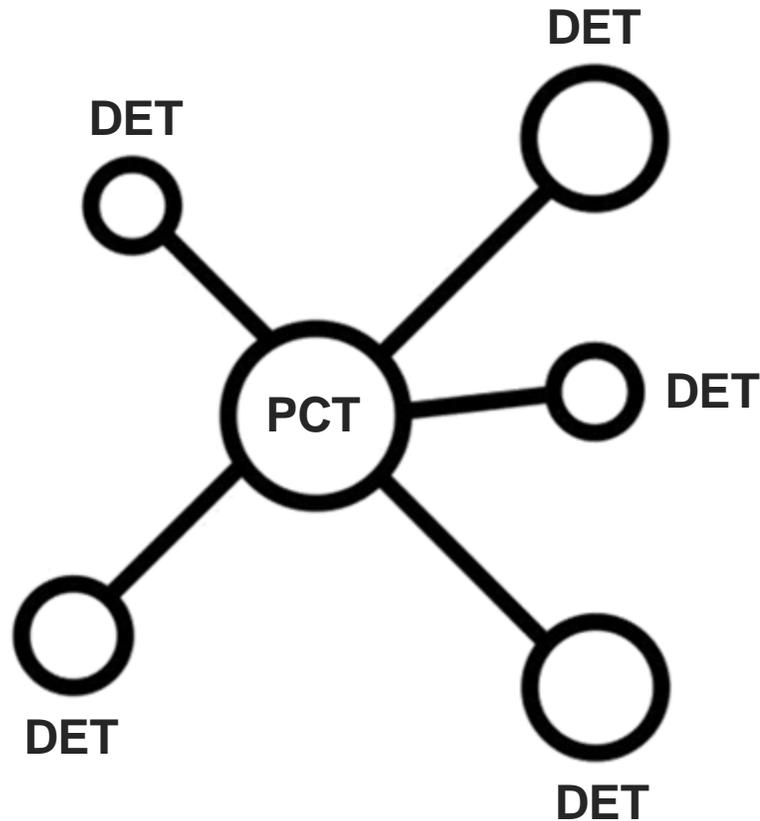


European
Commission

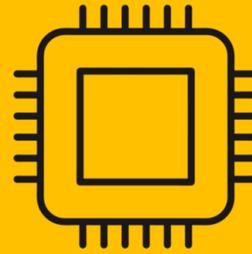


DET aims

- ▶ Establish a European semiconductor network of competencies and support



REDUCE DESIGN TECHNICAL BARRIERS



Overcome complexity of designing leading edge node chips

REDUCE DESIGN COST BARRIERS



Affordable solutions to lower entry costs of users (EDA flow, IP...)

DET delivers

▶ Enablement services

Cloud design services

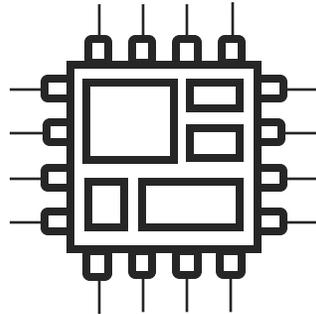
▶ *Design environment*



Secured Computing & Storage capacities, Link to the EU DP, EDA tools, Workflow, Virtual platform

App. Engineering services

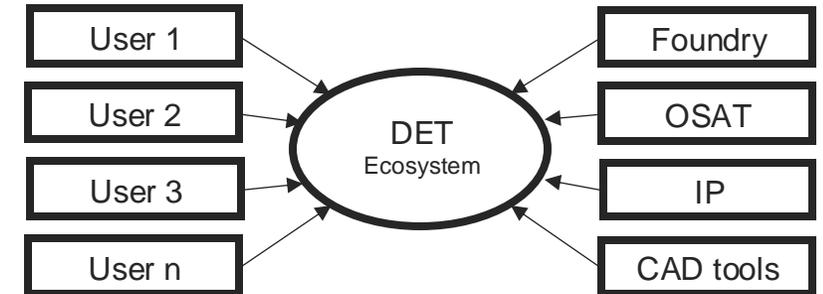
▶ *Expertise/Support*



IT/EDA support, Design expertise, Mentoring (specifications, pathfinding, bring up...)

Fabrication services

▶ *Supply chain*



Foundry and OSAT recommendation, MPW shuttle and test facilities access

DET cloud services



▶ Secured and setup design environment

1



Cloud-based design Infrastructure

Secured scalable HPC Cloud infrastructure for collaborative work (Compute & Storage Mgt., User&Prj mgt.)

2



Resource management

License Server PDK, EDA, IP resources mgt.

3



Silicon-Proven Design flow

Robust design flow dedicated for Chip design (system and tool maintenance)

4

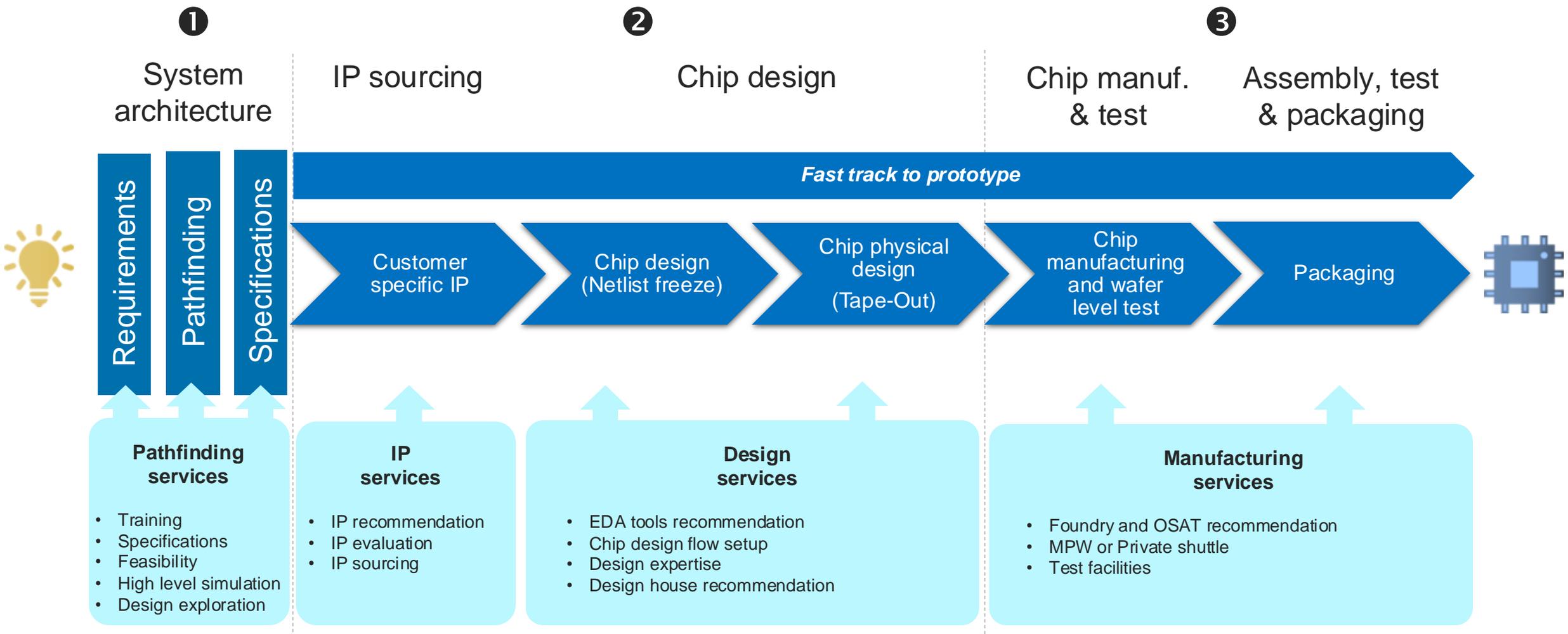
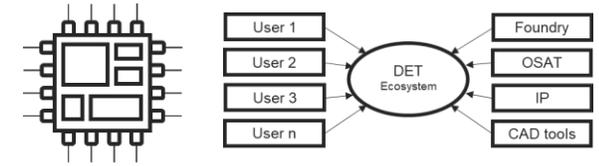


Support

On-Demand design enablement and expert support

DET competencies & supply chain

► From system architecture to final tests





2 ■ DET Users

Selection & Operational process

User eligibility to access to the DET services

► Companies that contribute to the European economy and sovereignty



START-UPS



Grant



SMEs



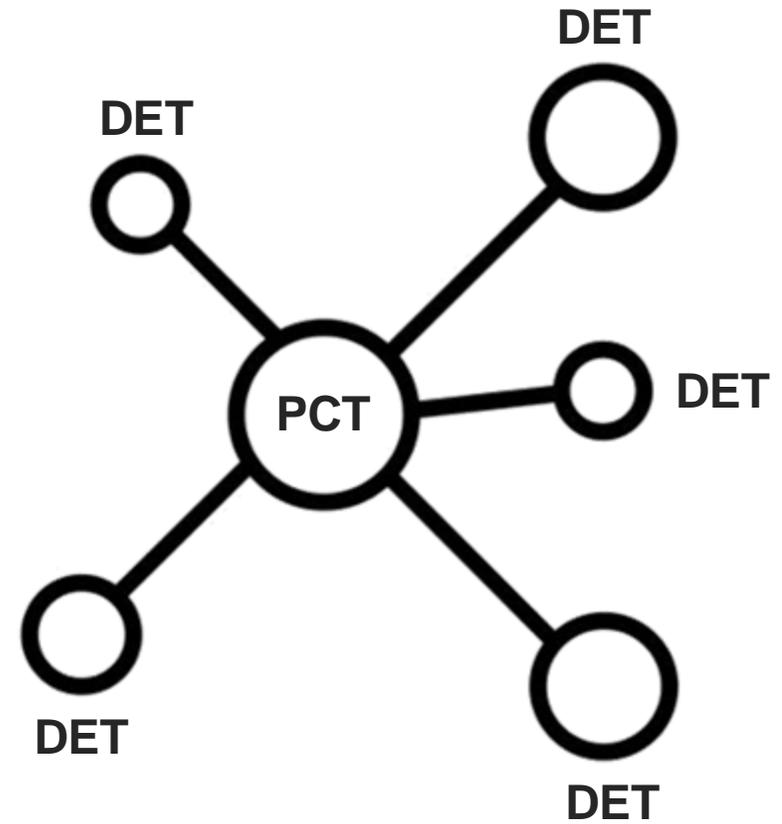
Grant



LARGE COMPANIES

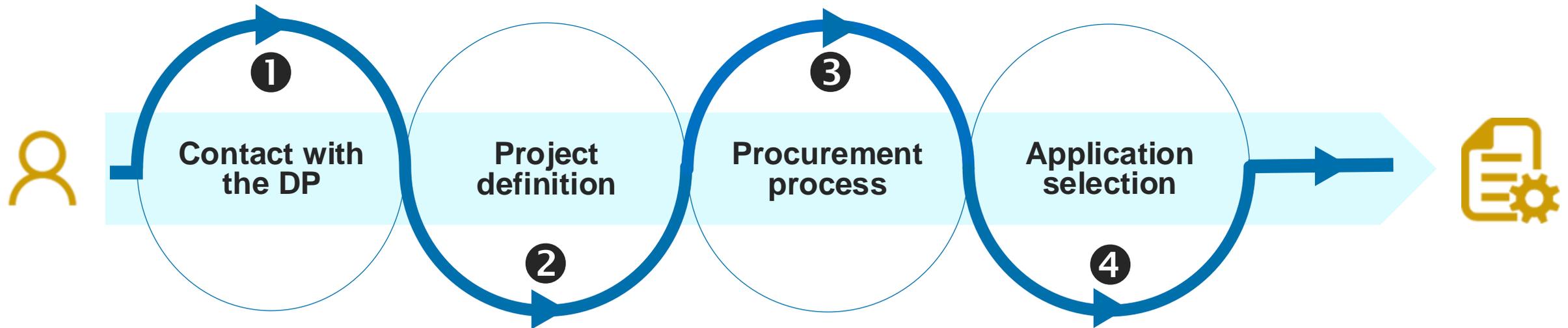


RESEARCH COMMUNITY



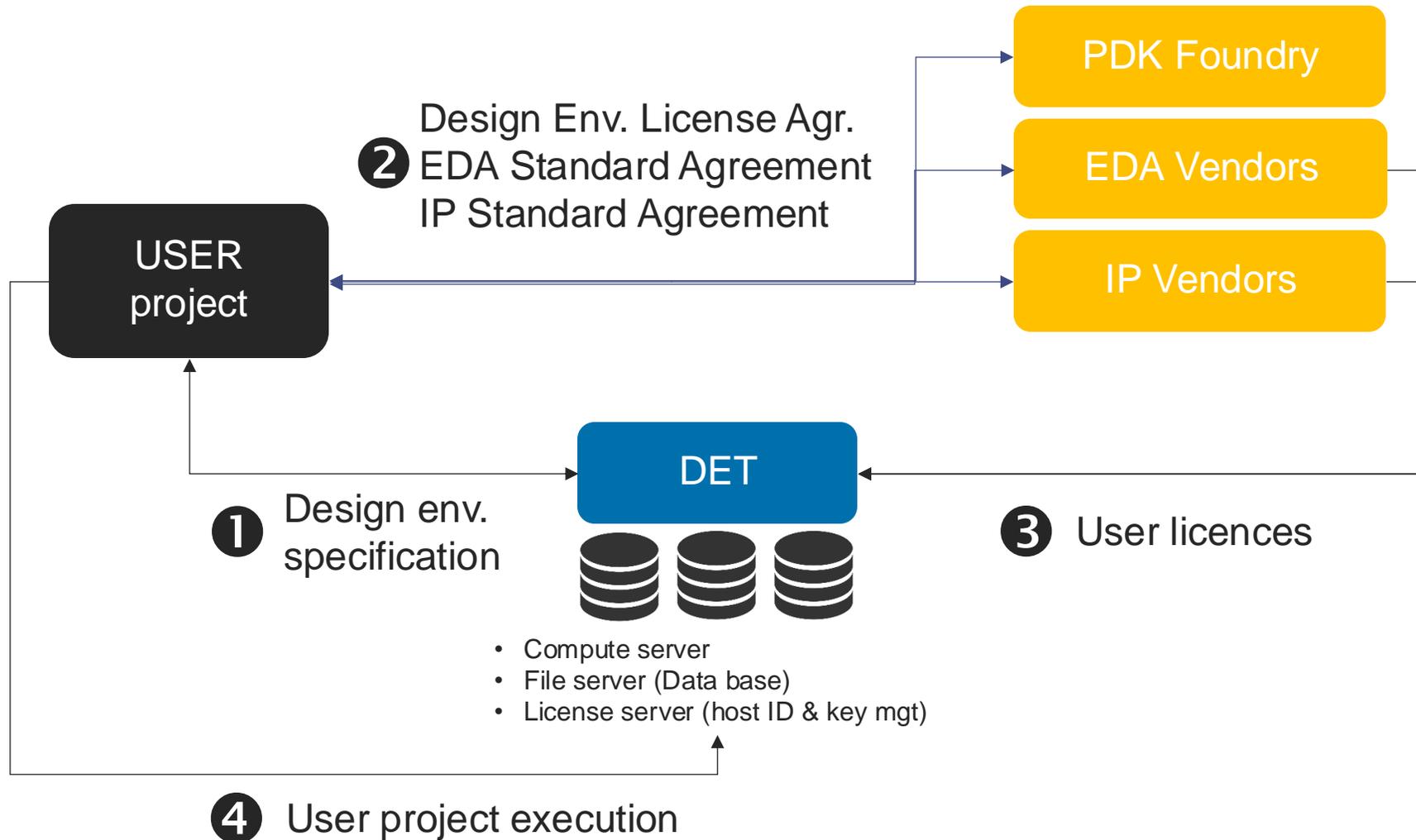
User project selection process

▶ From project definition to application selection



User project

► From design environment specification to project execution





3 ■ DET Candidates

Expectations

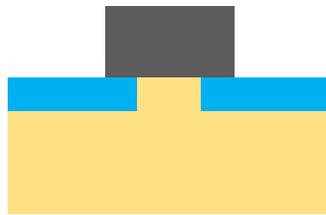
DET candidate requirements

▶ Single entity or Consortium

- ✓ **Eligibility** : A DET candidate can be a Single entity or Consortium composed of multiple entities (private or public) legally established within the territory of the European participating states
- ✓ **Scope of services:**
 - Cloud service capacity + Design flow support + Design expertise
 - End-to-end industrial services to design, prototype and testing
 - Access to industrial technologies or pilot-lines
- ✓ **Infrastructure:**
 - The DET must establish a secured local-cloud system connected to the central cloud of the design platform to access the Design Platform assets and report on the DET activities
 - The local-cloud infrastructure may be outsourced to a cloud provider, with the DET retaining full liability
- ✓ **Credibility:**
 - The candidate is part of an established chip design ecosystem that supports the end-to-end semiconductor supply chain
 - The candidate has a proven track record of delivering the announced services and expertise.

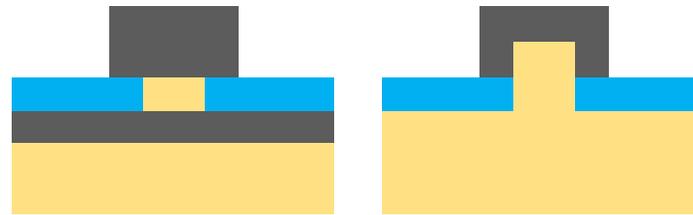
Key tech. to be supported by the DET network

CMOS BULK



180nm – 28nm

FDSOI & FinFET



28nm – 18nm

16nm – 5nm

More than Moore technologies

Photonics

Quantum

RF & mmW

Adv SIP

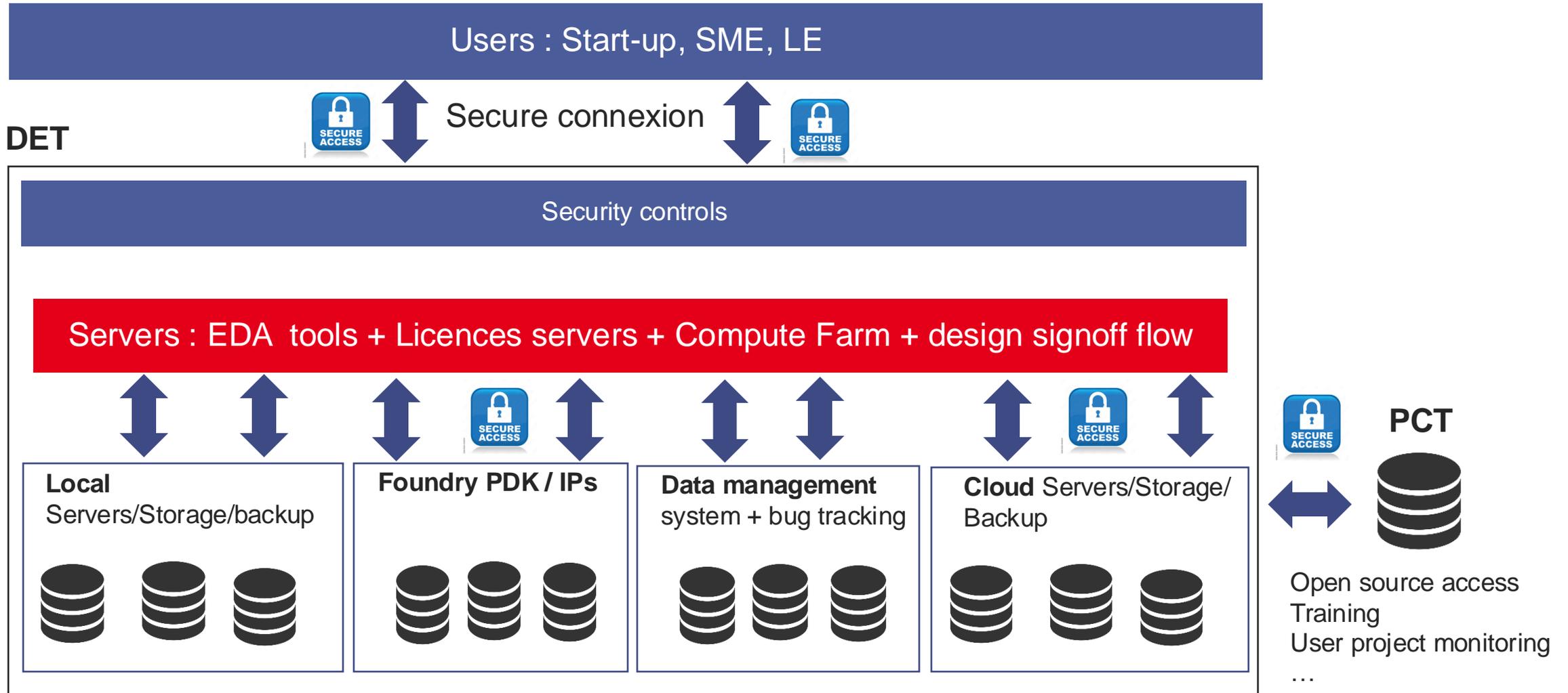
NVM...

In link with industrial semiconductor companies (Foundry, OSAT)...

...and EU Pilot lines

High-level illustration of DET cloud-instance

▶ Guideline provided by the PCT





DESIGN ENABLEMENT TEAM

Cloud design environment

Prototype

Supply chain

Thank you!

Technical support & expertise

Supply chain