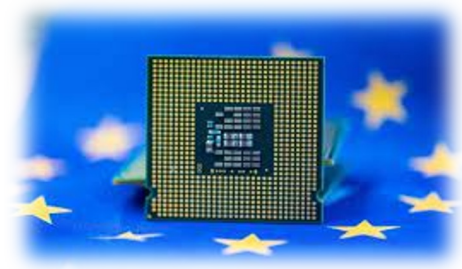


Design Platforms

Under the Chips for Europe Initiative
(Pillar 1 of the Chips Act)



Ambition: foster the development of the semiconductor design ecosystem in EU, reinforcing capacity to innovate and reduce time-to-market for IC design

Development of the semiconductor design ecosystem

EUROPRACTICE – a bottom-up approach

- Established in 1989 as EUROCHIP to stimulate microelectronics in academia and ensure the supply of a trained workforce to industry
- More than 600 academic institutes use the microelectronics design tools and Multi-Project Wafer (MPW) runs for their teaching, research and innovation activities
- EUROPRACTICE also serves as a breeding ground for emerging technologies (e.g. from pilot lines)



EUROPRACTICE – Way of Working



EUROPRACTICE and Industry

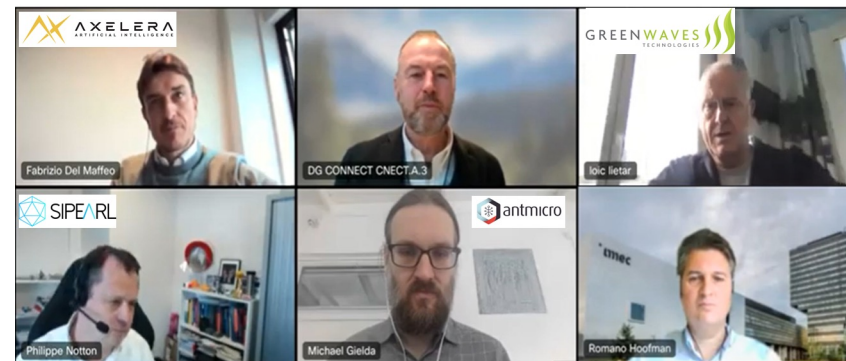


- EUROPRACTICE is mainly focused on Academia, but.....
 - Spin-outs are stimulated and supported through
 - Proof-of-Concept licenses
 - Subsequent commercialization agreements
 - Other companies can access EUROPRACTICE MPW runs
 - Routes to volume exist for most technologies.

Needs for startups and SMEs

- Easy access to design tools, IP and technologies (ideally as a “One-Stop-Shop”)
- Easy install and maintenance of design flows (incl. multivendor flows)
- Availability of people with the right skills
- Easy access to capital

Lower the risk, lower time-to-market and maximize their success rate



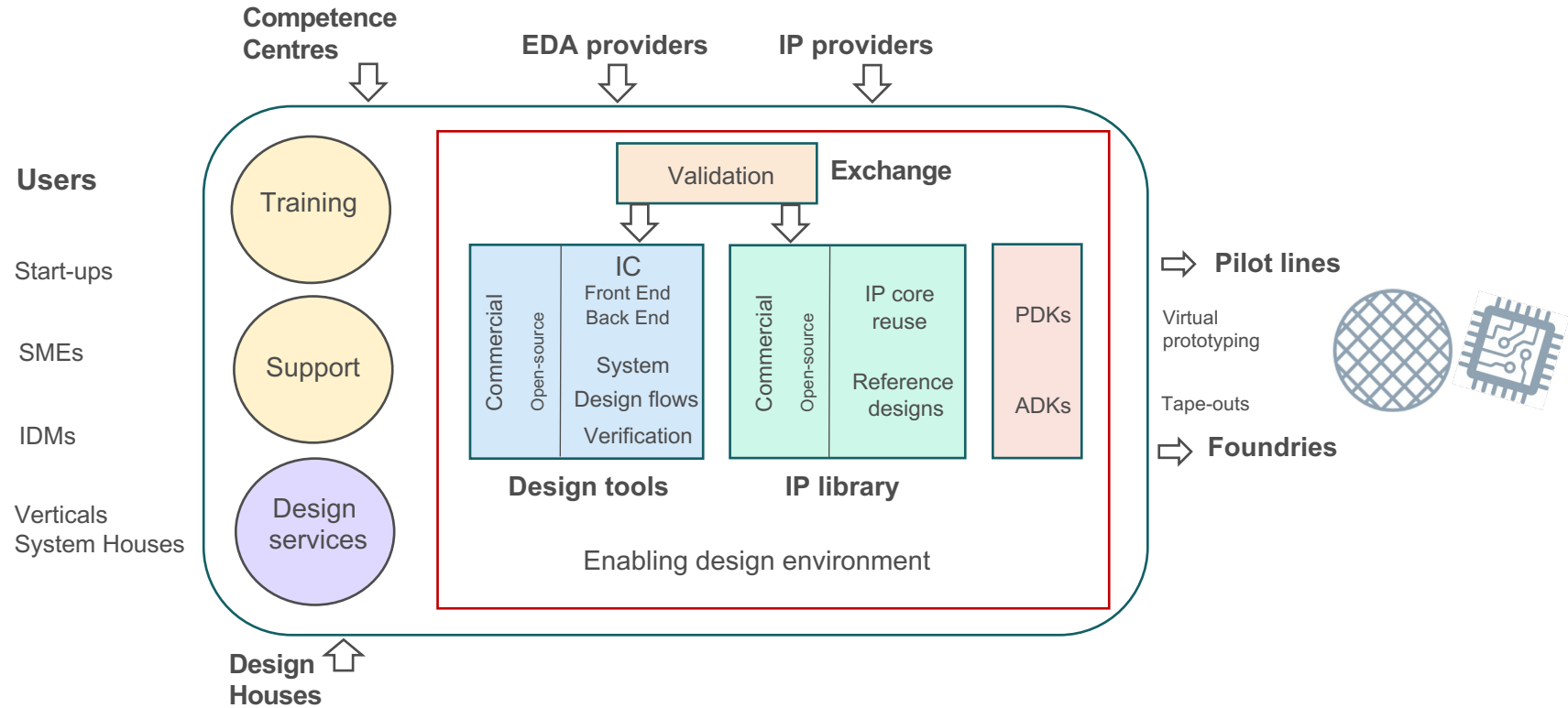
Design platform - objectives



- *Lower the barriers* for IC design (in particular for advanced technologies)
- *Foster collaboration* among EU stakeholders
- Support the *development of IC design skills* by offering training and support services through a network of competence centers
- Integrate *access to pilot lines* and fabs for early prototyping
- Leverage and *build upon existing platforms* or initiatives.

Develop a cloud-based design infrastructure where design tools, kits and flows, IP libraries and support services are easily accessible

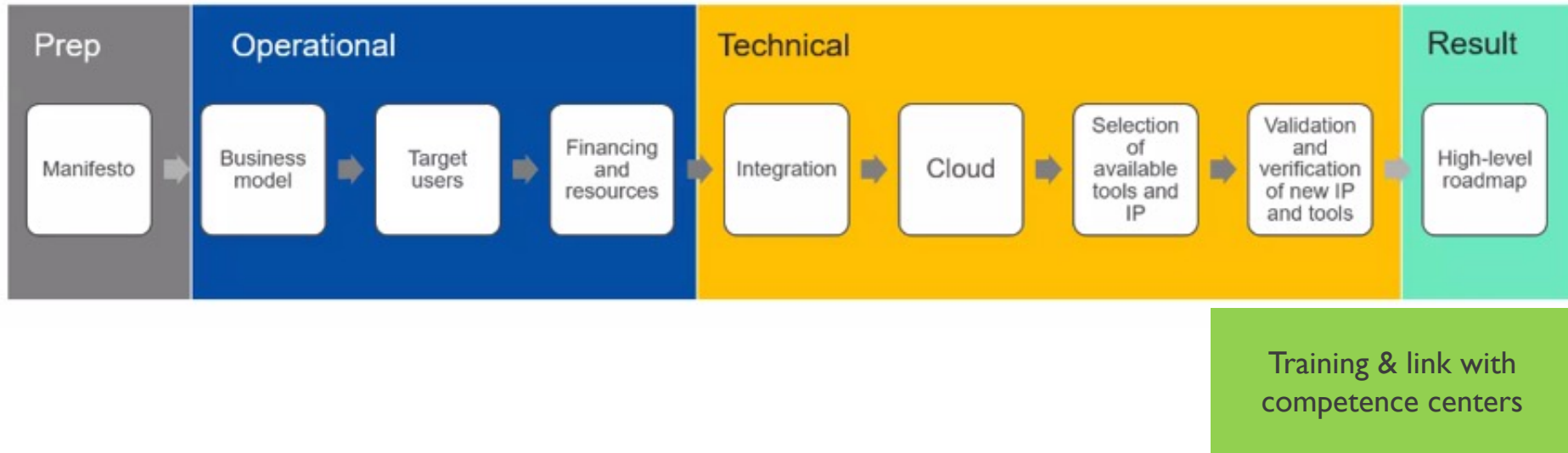
Design platform



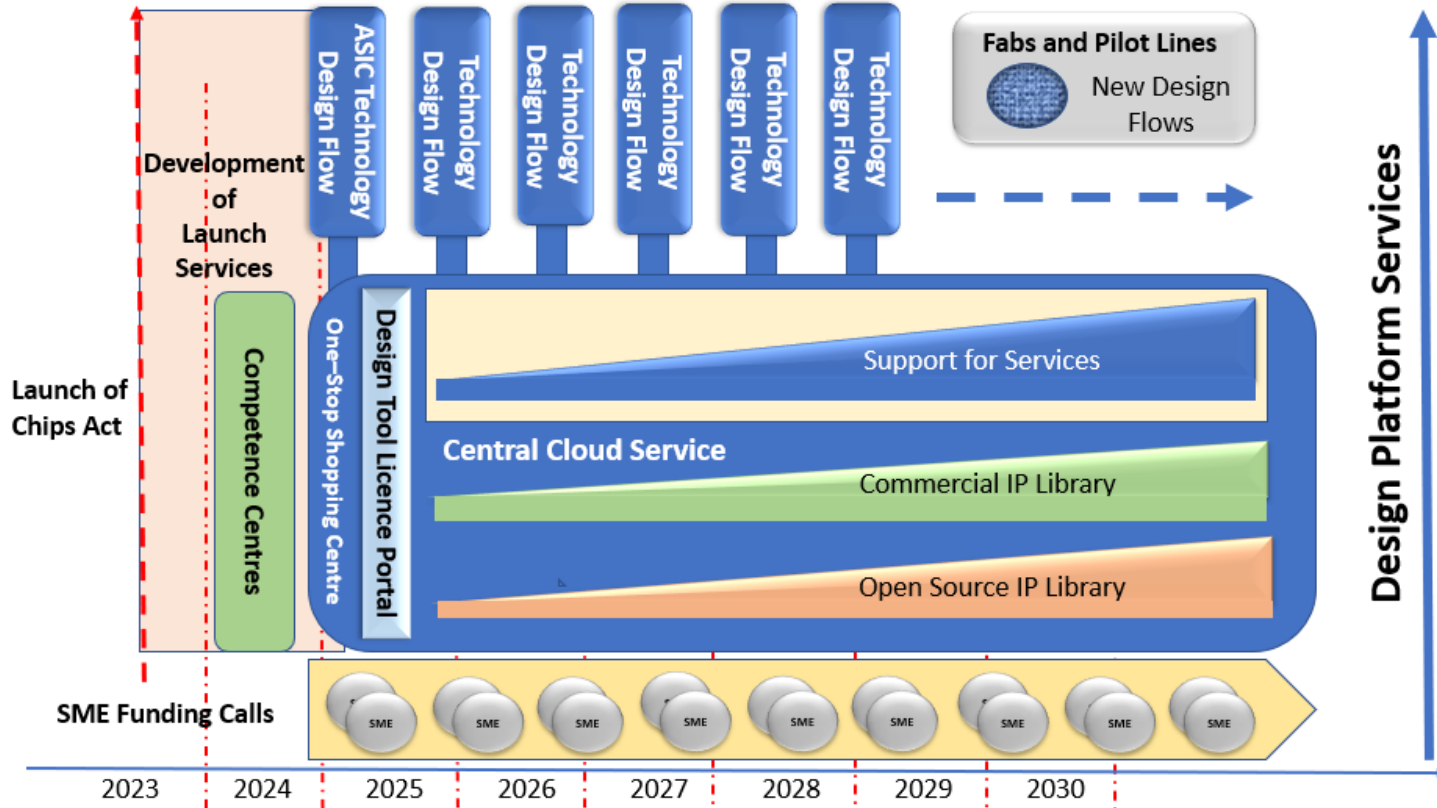
Design platform – important considerations for implementation

- **Complexity** – interoperability of different products from multiple vendors into single workflows combined with the management of licenses.
- **Cost** – lower the upfront investment for startups by pay-per-use license models and/or collective procurement of licenses and cloud resources.
- **Security** – hosting of sensitive user data and IP alongside foundry PDKs amongst other resources.
- **Efficiency** – monitor, optimize and upkeep the platform resources
- **Accessibility** – ensuring equal access across all Member States. The platform should be accessible to novel and experienced users alike, with support services adapted accordingly.
- **Neutrality** – platform must be vendor neutral and open.

Design Platform Working Group - Timeline



Design Platform Roadmap - simplified



Acknowledgements

Members of the Working Group

- **Ansys** - Babis Bakolias
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- **EC** – Marco Ceccarelli, Matthew Xuereb
- Haydn Thompson (rapporteur)



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