AI Chips and Systems for EU Compute Infrastructure

Chips JU Work Programme 2026

INFORMATION WORKSHOP - 3 JULY 2026

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Why Europe must act now

AI compute has become a geopolitical asset - Europe must reduce its dependence

~100%
dependence on non-EU AI tech

Virtually every AI chip, rack and integrated system in European data centres comes from a handful of **non-EU** suppliers

Chokepoint
outside Europe's control

Export controls, supply disruptions, unilateral pricing and vendor lock-in create a structural **vulnerability** for the EU

Full stack
is what sovereignty takes

Competitive European capacity from **chip** design to complete rack **systems** – including hardware and software

The policy mandate

Competitiveness Compass & Chips Act - design cutting-edge AI chips, rebuild European semiconductor capacity

AI Continent Action Plan - AI Factories & Gigafactories as demand drivers for EU AI processors

Technology sovereignty package - Chips Act 2.0 + Cloud and AI Development Act - stimulate demand and industrial uptake, reduce structural dependencies across the AI compute stack

The policy framework is in place, this call is execution

The objective: bring EU supply and demand together

Hands-on testing and near-term deployment in European infrastructure

Connect European **chip designers and system developers** with strategic downstream users - **AI Factories, Cloud Service Providers and data centre operators** - for testing and optimisation of complete solutions on dedicated experimental partitions and common EU testbeds

- **High performance & energy efficiency**
- **Scalable, full-stack solutions - chip to rack to software**
- **Reduced reliance on non-EU providers**

END-TO-END AI COMPUTE SOLUTIONS

- Complete software stack
- Boards & racks
- Networking
- **AI processors**

↓

Tested on common EU testbeds · deployed in EU infrastructure

A Grand Challenge, run as an open competition

Performance-based selection: public funding follows demonstrated results

1 Open entry

Any EU chip design company with taped-out silicon can enter (no pre-selection of champions).

2 One common benchmark

A neutral EU evaluation platform: identical workloads, auditable KPIs, equal access for all.

3 Performance decides

Best-performing solutions earn the *AI Compute Excellence Label* - evidence, not promises.

4 Winners scale up

Labelled consortia develop full racks and compete for real procurement by real buyers.

Winners are not picked on paper but by benchmarks

Selection on benchmark performance, energy efficiency, interoperability, software & operational readiness, price-performance and relevance for European sovereignty.

Two streams, one coordinated package

STREAM A - SUPPLIERS

EU AI chip & rack supplier stream

Topic A1 · 2026 **Simple Grant · EU funding €10 M**

AI chip demonstrators - develop, integrate and benchmark PCB-level prototypes (8 months).

Topic A2 · later stage *restricted to labelled consortia · expected EU funding ~€60 M*

Full AI compute racks - development, validation and deployment-ready systems.

STREAM B - BUYERS

EU AI compute evaluation & procurement

Topic B · 2026 **Grant for Procurement · EU funding €70 M**

Buyers' group of EU AI Factories & Cloud Service Providers:

- Operates the common evaluation platform (KPIs, workloads, benchmark reports)
- Procures pilot multi-rack systems (Pods) from validated EU suppliers

***Operationally linked**: Stream B provides the platform, workloads and validation evidence used to assess Stream A and then buys the winning systems.*

Stream B is insulated from Stream A's technology risk: buyers procure only validated, benchmarked systems.

The funnel: competition at every stage

From many chip demonstrators to a few deployed Pods; merit decides who advances

Phase 1 · Preliminary selection

Chip 1 | Chip 2 | Chip 3
Chip 4 | Chip n

- **Open competition**: PCB demonstrators with taped-out EU chips (~TRL 6)
- Comparative KPI test on the common platform => AI compute excellence label
- **Up to 10 projects, EU funding up to €1 M each**

Phase 2 · Rack development

Rack team 1 | Rack team 2
Rack team n

- **Downselect**: only **labelled** consortia develop full rack prototypes (~TRL 7)
- Common testbed trial by the buyers' platform
- **Expected EU funding ~€60 M (e.g. up to 4 consortia ~€15 M each)**

Phase 3 · Procurement & integration

Pool 1 | Pool 2
Pool n

- Each buyer pool purchases the prototype pods selected from evaluation (~TRL 8)
- Site-specific installation, integration & co-optimisation
- **€70 M procurement, of which up to €10M for evaluation, admin and integration**

EU funding across the package ≈ €140 M

Commensurate co-funding from JU Participating States expected

Total public funding up to ≈ €280 M

Where necessary, the above is to be complemented with participants' own private resources

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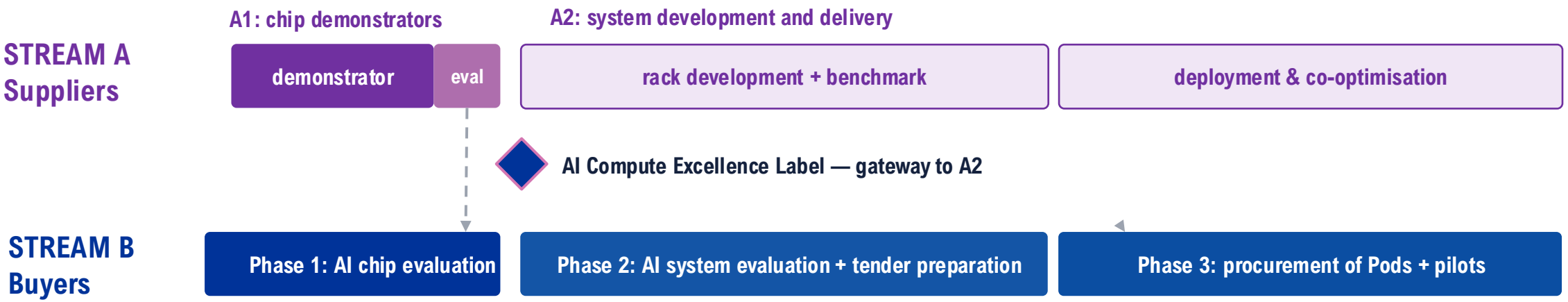
How the two streams interlock

Calls A1 & B open 07 Jul 2026 · deadline 23 Sep 2026 · projects start ≈ M0 early 2027 · A2 call follows the Label



Operationally linked streams

- To ensure seamless integration, the consortia of Stream A and B are expected to establish **mutual coordination arrangements** covering timelines, benchmark procedures, confidentiality and data sharing between suppliers and buyers
- The total expected timing of 42 months is indicative, the duration of each phase can be adapted based on agreements between the Stream A and B consortia

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What's in it for you

Opportunities for every part of the European AI compute ecosystem

Chip design companies

- Funding to turn taped-out silicon into benchmarked demonstrators
- Comparative evidence on a neutral EU platform - visibility & credibility
- The Excellence Label: a springboard to rack funding, real purchase orders and private investment

System & integration partners

- Join supplier consortia for integration, software bring-up and benchmarking
- In A2: rack integration, cooling, networking, manufacturing readiness
- Position early - labelled consortia may expand with new partners for the rack phase

Buyers: AI Factories & CSPs

- You shape what gets built: KPIs, workloads and specs defined by you from day one
- **Merit-based awards**: spend your lot's budget on sovereign compute from the supplier that performs best in your environment
- First-of-a-kind EU systems with public funding, custom co-optimization, and a credible sovereignty offer for public-sector & regulated customers

- DEP Article 12(6) restrictions apply: entities controlled by third countries may be eligible with security guarantees.
- Where technically necessary, costs of non-EU subcontractors for specified services may be eligible.
- All data must be processed and stored in the EU.

Topic A1 · AI chip demonstrators (for suppliers)

Key facts

Simple Grant, co-funded with NFAs

€10 M indicative budget

~€1 M EU contribution per project

8 months: 6 development + 2 benchmark

Focused, limited-size consortia

EU funding rate: up to 50% of eligible costs

Launch 07 Jul 2026

Deadline 23 Sep 2026 · 17:00 CET

Who should apply

At least one EU-established fabless AI chip design company (owning the chip IP), optionally with system integrators / OEMs for demonstrator integration and software bring-up.

Entry requirements: real silicon, not slideware

- Chip taped out at a commercial foundry; engineering samples within 3 months of the deadline
- PCB designed and in (or entering) production within the 6-month development phase
- Solution mature enough for bring-up, software enablement and benchmarking

The prize: the AI Compute Excellence Label

Awarded by the Chips JU to the best benchmark performers - the strict entry ticket to rack development under Topic A2

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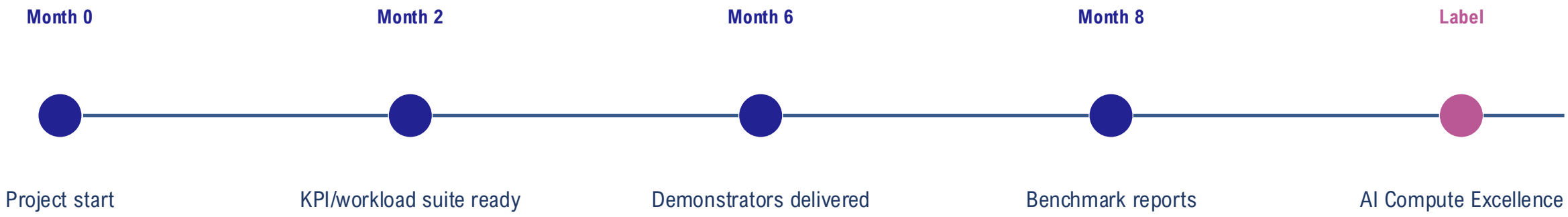
A1 selection: Benchmark evidence + Excellence Label



The Topic B consortium operates the evaluation platform and produces standardised benchmark reports.
The Chips JU uses this evidence to identify the best-performing solutions and award the AI Compute Excellence Label.

Topic A2 · AI compute racks: a look ahead

Preliminary topic description, for information only - Topic A2 will be launched at a later stage

The next step for labelled consortia: from demonstrator to deployment-ready rack

Key facts (preliminary)

Restricted call: AI Compute Excellence Label holders only

Expected budget ~€60 M (to be confirmed)

Duration up to 32 months (development + benchmark + deployment)

EU-only fallback: 50% of eligible costs if national co-funding is not confirmed within 60 days

Launch at a later stage - proposals due within 1 month of Label notification

Who: your A1 consortium can be expanded if needed

Led by the **EU chip design company** owning the chip IP; may add **system integrators**, **OEMs**, **software**, **networking**, **cooling** and **manufacturing** partners for rack development and post-deployment support

What to build in Phase 2

- Scale the demonstrator into a **full AI compute rack**: chassis, power, cooling, networking and the complete software stack
- Rack-level orchestration, scheduling, monitoring & management; modular, open, interoperable interfaces
- Validate against the full KPI set on the common platform; manufacturing readiness, serviceability and a commercial offer template for the procurement

What follows

- **Benchmark evaluation** by the Topic B platform produces the standardised report used in procurement.
- Consortia selected as **suppliers** then **deliver, install and co-optimise** their racks with the buyers at the pilot sites

Prepare now: your A1 demonstrator, benchmark results and partner network will be the foundation of your A2 proposal

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AI Chips and Systems for EU Compute Infrastructure

Topic B: the buyers' stream

How the two streams interlock

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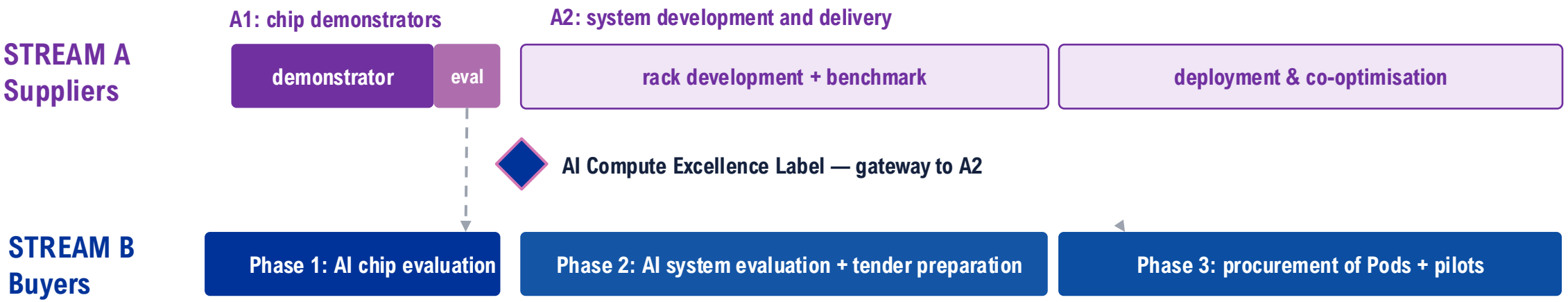

Operationally linked streams

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Topic B · Evaluation platform & procurement (for buyers)

Key facts

Grant for Procurement (GfP)

€70 M EU + national co-funding

Three phases, duration tbd (indicative 42m)

Max ~15 participants, from ≥3 Member States, EU/EEA-established

Most of the budget flows to suppliers via procurement

EU contribution: 25% for-profit / 35% SME / 50% public & non-profit

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One buyers' group, two anchors

≥1 public AI/HPC operator
Contracting authority running an EU AI Factory — preferred Lead Procurer

≥2 EU Cloud Service Providers
Leading commercial procurement lots; neutrality safeguards required

Three phases, one mission

1 · Evaluate chips
Common platform, KPIs & workloads; benchmark A1 demonstrators

2 · Evaluate racks
Extend platform to rack level; benchmark A2 systems; prepare tenders

3 · Procure Pods
Innovation procurement of multi-rack pilot clusters; install & co-optimise

- *The platform is neutral: equal access, auditable KPIs, standardised benchmark reports*
- *The benchmark reports are factual, auditable **evidence**: they support **Chips JU selection** and later **buyer procurement** without replacing formal evaluation/procurement procedures*

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Building the buyers' group: few pools, meaningful pilots

Concentrate, don't fragment - every installation must matter

Example with 3 pools

Lead Procurer
public contracting authority operating an EU AI Factory

Pool 1 · AI Factories
1 lead buyer
+ public partners

Pool 2 · CSP
1 lead buyer
+ DC operators

Pool 3 · CSP
1 lead buyer
+ DC operators

Each pool = one procurement lot = one meaningful pilot installation

Separate pools accommodate different requirements and competition among commercial buyers.

How to structure it well

- Keep the number of pools small (indicatively 2–3), each led by one lead buyer with committed members
- Concentrate the procurement budget: each pilot Pod must be of credible, meaningful scale, hence fragmentation across many small sites should be avoided
- Demonstrate neutrality vis-à-vis Stream A suppliers from the outset
- **Start now: align KPIs, workloads and site commitments before 23 September**

A compact, committed buyers' group is a selection advantage and delivers pilots that matter

Europe sovereign AI compute

Start building your consortium now!

- ***Supplier teams need their system partners***
- ***Buyers need to form pools and a joint group***

07 Jul 2026

Calls A1 & B open

23 Sep 2026 · 17:00

Submission deadline (Brussels time)

Up next: *technical briefing on call modalities, eligibility, evaluation and how to apply.*

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Thank you!

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How to prepare a strong proposal

Focus on readiness, evidence, and credible deployment pathways

For A1 supplier teams

- Show chip/PCB readiness and integration plan.
- Demonstrate software stack maturity and AI workload readiness.
- Define clear route from demonstrator to full rack.
- Document IP origin, supply dependencies and security controls.

For Stream B buyers

- Build a focused buyers group with clear lot leadership.
- Define neutral KPIs, workload suite and access procedures.
- Show testbed/site readiness and conflict-of-interest safeguards.
- Prepare procurement strategy for meaningful multi-rack deployments.

Proposal quality will be judged not only on technology ambition, but on operational credibility: can the solution be tested, compared, procured and deployed?

What can be benchmarked?

A common KPI suite reflects real operational requirements of buyers

Performance	throughput, latency, batch behaviour
Energy	perf/W, rack power envelope, cooling
Scalability	multi-chip, multi-node, networking fabrics
Software	drivers, compiler/runtime, framework support
Operations	orchestration, monitoring, reliability, serviceability
Value	price-performance and European deployment relevance

Benchmark reports become the common evidence layer: same workloads, controlled conditions, reproducible results.