



INNOVASPHERE
Powering the Future

EIC PATHFINDER

GUIDE FOR CONSORTIUM CREATION

A strategic framework for scientific teams, startups, universities, and technology organisations

PURPOSE OF THIS GUIDE

This guide helps scientific teams, startups, universities, hospitals, technology centres, and transfer organisations build a highly credible consortium for an EIC Pathfinder Open proposal. It is written not from the perspective of how to gather many partners, but from the perspective of how to build the minimum, interdisciplinary, and fundable consortium that makes a breakthrough credible.

Core principle

A winning consortium is not the biggest, the most international, or the most prestigious. It is the minimum set of actors without whom the breakthrough cannot happen.

01 WHAT PATHFINDER REALLY EXPECTS

Pathfinder Open does not fund generic collaborative research. It funds projects with a radical long-term vision, a clear science-to-technology breakthrough, a credible proof of principle at TRL 1–4, and essential interdisciplinarity. The consortium is evaluated not as a sum of CVs or logos, but as the human architecture that makes the breakthrough possible.

An evaluator wants to answer yes to these six questions:

- Does this team cover all the critical scientific uncertainties?
- Are the included disciplines truly distinct and necessary?
- Does every partner have a clear, non-decorative role?
- Does the interaction between partners look real, or merely parallel?
- Is the coordinator scientifically central to the project?
- Is the consortium proportionate to the challenge — not artificially large?

02 GOLDEN RULE: DESIGN THE BREAKTHROUGH FIRST

One of the most common mistakes is to build the consortium backwards — first talking to familiar partners, then trying to adapt the project around them. In Pathfinder, the correct order is:

- **Step 1:** Define the breakthrough
- **Step 2:** Identify the 3–4 uncertainties or bottlenecks that could kill it
- **Step 3:** Only then identify the partners who resolve those points

For each partner, ask four questions:

What do they bring that nobody else brings?

What risk or uncertainty do they resolve?

What critical task depends on them?

What would happen if they were missing?

If you cannot answer clearly — that partner should not enter as a full partner.

03 CONSORTIUM SIZE: WHAT EVALUATORS PREFER

There is no formal preference for 3, 4, 5 or 6 partners. Evaluators tend to favour small but complete consortia with high mutual necessity and low redundancy.

Partners	When it works	Verdict
3	Very focused, tightly scoped project	Valid
4	Full coverage, no excess — the sweet spot	Optimal
5	Reasonable when the fifth role is clearly justified	Good
6+	Only if the scientific architecture genuinely requires it	Risky

What is penalised by evaluators

- **Partners included for prestige** — they must bring something nobody else can
- **Partners included because they may help** — roles must be concrete, not vague
- **Template partners** — organisations copy-pasted from proposal to proposal
- **Redundant expertise** — multiple groups with nearly identical capabilities

04 THE 4 CRITICAL POSITIONS

Almost all strong Pathfinder consortia cover four structural functions. Think of these not as boxes to fill, but as questions to answer about the breakthrough.

01 Breakthrough Creator

Creates the core new scientific or technological concept.

- Materials laboratory
- Chemistry group
- Experimental physics group
- Advanced biotechnology group
- Disruptive electronics team

02 Predictive / Mechanistic Validator

Explains, predicts, or validates why the breakthrough should work.

- Molecular modelling and simulation
- Computational physics

- Design AI / inverse design
- Mechanistic analysis and theory

03 Proof-of-Principle Validator

Validates the PoP in the relevant system.

- Functional biology or organ-on-chip
- Preclinical validation
- Instrumentation and testbeds
- Prototyping laboratory

04 Translation / Integration Enabler

Makes it credible that the PoP will not remain isolated in the lab.

- Advanced characterisation and system integration
- IP strategy and freedom-to-operate
- Market intelligence and stakeholder mapping
- Communication, dissemination and early translation support

05 INTERDISCIPLINARITY THAT CONVINCES

Pathfinder does not reward interdisciplinarity in the abstract. It rewards interdisciplinarity that the breakthrough genuinely needs — where each discipline is load-bearing.

✓ Credible interdisciplinarity	✗ Weak interdisciplinarity
— Chemistry / materials + modelling + biological validation — Hardware + software / AI + domain science — Biology + microfluidics + electronics — Physics + materials + applied test environment	— Three groups from the same field with slightly different sub-specialties — Disciplines with no real integration mechanisms between them — An 'impact partner' with no real connection to the scientific logic

Evaluators want to see why this combination of disciplines is unusual and necessary, what it can achieve that no single discipline could do alone, and how the partners will actually integrate their work — not just run parallel tracks.

06 WHAT GOOD CONSORTIA LOOK LIKE

A. Causal-chain consortia

Evaluators want to see a logical sequence: one partner creates the material or principle, another predicts or explains, another validates, another integrates and prepares the future pathway. The story flows.

B. Consortia where every partner is indispensable

It is not enough for a partner to fit. They must appear necessary. Remove any one of them and the breakthrough should become clearly less credible.

C. Consortia with real integration

- Cross-partner tasks and shared deliverables
- Common testbeds and inter-lab validation
- Exchange of samples, data, and models between partners
- Go/no-go decisions that depend on multiple partners simultaneously

D. Balanced between science and future impact

Pathfinder is not the EIC Accelerator, but it still wants to see a plausible route to future uptake. A consortium that includes a credible future translation function — without becoming too downstream — is viewed positively.

07 THE FIVE CONSORTIUM ARCHETYPES TO AVOID

The Decorative Consortium	Many logos, many countries, little real necessity. The project reads as a networking exercise.
The Redundant Consortium	Two or three partners doing almost the same thing. Evaluators wonder why both are needed.
The Parallel Consortium	Each partner stays in their own WP with little scientific interaction. It reads as three separate projects.
The Misaligned Consortium	A partner looks strong on paper, but the assigned role does not match their actual expertise.
The Too-Downstream Consortium	Too industrial or market-driven for TRL 1–4. The project reads as EIC Accelerator, not Pathfinder.

08 THE ROLE OF THE COORDINATOR

The coordinator does not need to be the biggest or most famous organisation — but they must be scientifically central to the breakthrough, capable of coordinating a Horizon project, respected by the consortium, and coherent with the project narrative.

⚠ Bad signal	✓ Good signal
— The coordinator looks peripheral and appears only to manage. The scientific lead is clearly someone else.	— The coordinator is at the centre of the scientific core and has genuine integration authority over the key outputs.

09 JUSTIFYING A TRANSFER OR IMPACT PARTNER

Many clients ask whether to include an organisation specialised in tech transfer, IP/FTO, market analysis, communication and dissemination, stakeholder engagement, or future translation support.

Short answer:

Yes — but only when the project genuinely needs it. Not as a default.

When it makes sense

- The project needs an exploitation, IP, or translation function the scientific partners cannot cover
- There is a clear need to map the market, freedom to operate, regulation, and pathway to future uptake
- Communication and dissemination need to be professionalised beyond what researchers can do
- The partner has a concrete, proportionate, Pathfinder-compatible role

When it does not make sense

- If included by habit or to add a country flag
- If the role is generic or could be handled by subcontracting
- If it absorbs too large a share of budget for its contribution
- If it tries to position itself as a core scientific partner without being one

10 BUILDING THE CONSORTIUM NARRATIVE

A strong proposal does not just list partners — it argues why this specific combination is unique. An ideal consortium paragraph communicates three things simultaneously:

- **Necessity:** Why this set of partners is required (not just convenient)
- **Interaction:** How they will actually work together and what they exchange
- **Credibility:** Why together they make the breakthrough plausible

Example narrative structure

- Partner 1 creates the scientific-technological core
- Partner 2 provides predictive or mechanistic validation
- Partner 3 demonstrates the PoP in the relevant system
- Partner 4 integrates and makes the result a credible future platform
- Partner 5 — if justified — strengthens translation via IP, FTO, dissemination, or pathway-to-adoption support

11 WORK PACKAGE STRUCTURE

The work plan must reflect the consortium logic. WPs should not be silos — each must show real task sharing and interdependence across partners.

WP	Title	Integration signal
WP1	Project Management & Coordination	Coordinator + all partners
WP2	Breakthrough Creation	P1 lead — inputs from P2 modelling
WP3	Mechanistic / Predictive Validation	P2 lead — uses P1 outputs
WP4	Proof-of-Principle Validation	P3 lead — P1 & P2 inputs, go/no-go with all
WP5	Translation, IP, Dissemination	P4/5 lead — only if genuinely justified

12 PRE-SUBMISSION CHECKLIST

Run this test before submitting. If the answer to two or more questions is no — the consortium is not ready.

- ☐ Does the consortium cover the 4 critical positions?
- ☐ Is every partner indispensable?
- ☐ Are there zero obvious redundancies?
- ☐ Is the coordinator scientifically central?
- ☐ Is the interdisciplinarity genuinely necessary to the breakthrough?
- ☐ Does the PoP depend on interaction between partners?
- ☐ Is there a credible future translation / impact function?
- ☐ Is the consortium size proportionate to the challenge?
- ☐ Do roles, WPs, and effort all tell the same story?
- ☐ Can the consortium be explained in one paragraph without sounding forced?

13 FINAL RECOMMENDATION

If there is one idea to remember, it is this:

In Pathfinder, a winning consortium is not a collection of good institutions. It is a minimum architecture of critical capabilities that makes the breakthrough inevitable.

Before confirming any partner, ask:

Does this partner resolve a real bottleneck?

Would the project lose credibility without them?

Or do they simply look good on paper?

The difference between a competitive consortium and a mediocre one often lies exactly there.

14 HOW INNOVASPHERE CAN HELP

When a project genuinely requires it, InnovaSphere can act as Translation / Integration Enabler — adding strategic value in a concrete, proportionate, Pathfinder-compatible role.

- IP strategy, FTO analysis, and patent landscape
- Market intelligence and competitive mapping
- Stakeholder and investor mapping
- Early translation and commercialisation strategy
- Professional communication and dissemination planning
- Event orchestration and ecosystem activation
- Future pathway design and exploitation planning

This role is not offered as a default — but as a strategic function that strengthens proposal credibility when these capacities are not solidly covered by the scientific core of the consortium.

Building a Pathfinder consortium is not about adding partners.

It is about designing a structure of scientific trust.



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