

# INNOVATION PROCUREMENT & Industry Clusters in Big Science



## Key conclusions

Engagement with industry clusters, prime contractors and innovation-driven companies shows that:

- Industry has strong experience delivering complex, high-tech solutions for Big Science
- Innovation often emerges during project delivery but is rarely incentivised explicitly in procurement
- Rigid procedures and prescriptive specifications can hinder innovation
- Early dialogue with suppliers improves feasibility, quality and outcomes
- Innovation leadership can be retained even when development is outsourced
- Long-term operability, supplier stability and intellectual property (IP) strategy are critical for success

## Key challenges identified

- Limited flexibility in procurement procedures
- Unclear or overly detailed technical specifications
- Late involvement of industry and clusters
- Lack of structured approaches to outsourcing innovation
- Insufficient incentives for co-development and innovation
- Fragmented engagement with industry ecosystems

## Recommendations for Big Science Organisations

To strengthen innovation procurement, BSOs should:

1. **Clarify make-or-buy strategies** - Decide when to develop in-house and when to outsource, based on the uniqueness and global availability of competencies.
2. **Use performance-based specifications** - Define what is needed, not how it must be built, allowing suppliers to innovate.
3. **Engage industry early** - Use early supplier dialogue to refine needs, improve specifications and reduce risk.
4. **Adopt phased and modular procurement** - Break procurement into stages (research, development, manufacturing, servicing) and involve different partners where appropriate.
5. **Strengthen IP frameworks** - Create clear and fair IP arrangements that reward co-development and ensure long-term access.
6. **Work more closely with industry clusters** - Leverage clusters for matchmaking, consortium building and access to innovation ecosystems.

## Key message

Innovation procurement in Big Science is most effective when flexibility, early dialogue and partnership-based approaches are embedded into procurement strategies, enabling innovation while managing risk.