AI Factory

Accelerating AI Innovation

Service Catalogue

version 1

https://bsc-aifactory.eu/

Co-funded by the European Union

EuroHPC Joint Undertaking

This project has received funding from the European High-Performance Computing Joint Undertaking (JU) under grant agreement No 101234399 and Spain, Portugal, Romania and Türkiye. The JU receives support from the European Union's Horizon Europe Programme. It is also co-funded by the Department of Research and Universities of the Government of Catalonia and the Spanish Ministry for Digital Transformation and the Civil Service.

Introduction

The BSC AI Factory Service Catalogue (BSC AIF SC) is your one-stop gateway to AI services, designed to make your requests seamless, transparent, and efficient. Acting as a “standardisation engine,” it connects front-office intake with back-office delivery, ensuring your needs are assessed, prioritized, and fulfilled end-to-end. By aligning your demands with our current technical capabilities and team capacity, the catalogue guarantees that services are ready to deploy, reliable, and scalable, enabling you to achieve results faster and with confidence.

The BSC AIF SC will continuously evolve under a well-defined governance mechanism, ensuring that it grows strategically without scope creep and maintains the right balance between ambition and operational reality.

Foundations & AI Expertise

The BSC AI Factory Service Catalogue comprises the following 24 services:

Infrastructure & Computational Resources Access

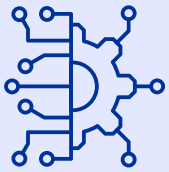
- Infrastructure and Computational Resources Access
- Onboarding Support
- High-level Technical Access Support

AI Development Data-Related Services

- Data Discovery
- Data Stewardship
- Data as a Service
- Model and Dataset Publication

AI Development Advisory Services

- Advisory on Model Fine-tuning
- Advisory on Model Benchmarking
- Advisory on Prompt Engineering
- Advisory on RAG Systems



Trustworthy AI

- Consultancy on Ethical and Legal AI Self-Assessment
- AI Trustworthiness Consultancy

Ad hoc AI Services & Expert Consulting

- Ad hoc AI Services
- Healthcare and Clinical Environments
- Climate and Earth System Analysis
- LangTech Expert Briefings

Adoption, Skills & Ecosystem

Training & Skills Development

- Courses Catalogue
- Learning Platform / Online Modules

AI Ecosystem & Engagement

- Events & Co-Marketing
- Incubation Spaces

Enablement & Introductory Services

- Briefing about BSC AI Factory and initial customer assessment
- Sectoral AI Maturity Assessment - Questionnaire
- Issuance of BSC AIF Certificates

Infrastructure & Computational Resources Access

Item	Description
Description	BSC AI Factory experts provide strategic guidance on AI and High-Performance Computing (HPC) infrastructure options, advising organizations on the best usage of computing environments.
Benefit	Get expert advice on AI and HPC infrastructure options, ensuring your organization makes the most of its computing environments. Through high-level advisory, you receive guidance on possible infrastructure routes (including BSC and other relevant environments where applicable) helping you move forward with greater clarity and confidence. This service provides advisory only and does not include infrastructure allocation or technical onboarding.
Service	Infrastructure & Computational Resources Access
Category	Infrastructure & Computational Resources Access

Onboarding Support

Item	Description
Description	Standard orientation service for new HPC and AI infrastructure users, covering access procedures, portals, and essential start-up guidelines.
Benefit	Get started quickly with HPC and AI infrastructures. This orientation service guides newcomers through access procedures, user portals, documentation, and basic usage guidelines, helping them understand the essential steps to begin operating within the infrastructure. This service covers standardized onboarding activities only.
Category	Infrastructure & Computational Resources Access
Service	Onboarding Support

High-level Technical Access Support

Item	Description
Description	For challenges beyond standard support, you gain direct expert guidance to effectively navigate and coordinate advanced infrastructure environments.
Benefit	Access expert technical guidance for complex AI and HPC infrastructure needs. This service provides expert guidance on complex access-related questions and facilitates coordination where needed, helping clarify technical aspects associated with AI and HPC infrastructure environments. The service focuses on advisory and coordination and does not include implementation or development activities.
Service	High-level technical access support
Category	Infrastructure & Computational Resources Access

AI Development
Data-Related Services

02

Data Discovery

Item	Description
Description	This service helps you quickly discover and assess the datasets that truly matter to your business. Rather than investing time in searching, comparing, and second guessing different options, you receive clear, practical guidance from day one. With support of BSC AI Factory experts, you can confidently select the external data sources that best support your objectives, enabling you to move ahead faster, reduce uncertainty, and maximize your impact.
Benefit	Discover the right data for your AI project with expert guidance. The Data Discovery service provides expert orientation to help you identify suitable external datasets and assess their relevance to your project. The service focuses on identification and preliminary assessment and does not include data acquisition, preparation, or validation activities. Identify and assess high-value datasets that strengthen model performance and project outcomes.
Service	Data Discovery
Category	AI Development Data-Related Services

Data Stewardship

Item	Description
Description	The Data Stewardship service provides expert advisory support to help you establish sound governance and management practices for your datasets ensuring they are FAIR-compliant and AI-ready. By acting on expert recommendations, your team can establish the governance practices and documentation standards that make your data assets reusable, compliant, and ready to connect with other BSC AI Factory services.
Benefit	Build reliable, FAIR-compliant, and AI-ready datasets The Data Stewardship service guides customers in structuring, quality control, and risk mitigation for their datasets, enabling FAIR compliance and AI readiness.
Service	Data Stewardship
Category	AI Development Data-Related Services

Data as a Service

Item	Description
Description	Browse, explore, and request access to BSC AI Factory datasets with rich metadata across domains making it easy to find and use the data you need.
Benefit	Gain immediate access to curated and governed datasets without the need for acquisition, preparation, or transfer. By providing secure, ready-to-use data hosted or federated by BSC, the BSC AI Factory enables faster experimentation and drives data-driven innovation.
Service	Data as a Service
Category	AI Development Data-Related Services

Model & Dataset Publication

Item	Description
Description	Harmonize metadata, validate documentation, and register outputs in BSC Dataverse with persistent identifiers making your research assets accessible, citable, and ready for BSC AI Factory workflows.
Benefit	With the Model & Dataset Publication service, you can confidently document, register, and publish your assets through BSC Dataverse. Your work becomes more visible, reusable, and citable, while maintaining compliance and high-quality metadata.
Service	Model & Dataset Publication
Category	AI Development Data-Related Services

AI Development Advisory Services

02

Advisory on Model Fine-Tuning

Item	Description
Description	This advisory service guides you on fine-tuning strategies and infrastructure considerations, helping you deploy foundation models efficiently, reduce experimentation time, and achieve more effective AI outcomes in your domain.
Benefit	Gain clarity on fine-tuning foundation models for your use case. This service provides high-level advisory on model selection, fine-tuning strategies (e.g., SFT, LoRA, QLoRA), and general considerations related to infrastructure environments such as MN5. It equips you with the guidance needed to plan effective AI model adaptation while reducing uncertainty and risk. The service focuses on strategic and technical guidance and does not include model training, implementation, or workflow execution.
Service	Advisory on Model Fine-Tuning
Category	AI Development Advisory Services

Advisory on Model Benchmarking

Item	Description
Description	Benchmark your AI models with confidence. Get expert guidance on performance indicators and evaluation approaches across computational environments, so you can assess your models effectively and make informed AI decisions.
Benefit	Gain clarity on evaluating your AI models' performance. You will receive high-level advisory on benchmarking methodologies, relevant performance indicators (e.g., throughput, latency, memory usage), and general considerations related to different computational environments. The service focuses on guidance and framework definition only; it does not include executing benchmarking experiments or performance certification.
Service	Advisory on Model Benchmarking
Category	AI Development Advisory Services

Advisory on Prompt Engineering

Item	Description
Description	Our experts guide you on advanced Prompt Engineering strategies (including Chain-of-Thought (CoT), few-shot learning, and RAG integration) to enhance output quality, reliability, and alignment with your business logic.
Benefit	Maximize the impact of your LLMs without costly fine-tuning. This rapid-response consulting service helps you unlock higher-quality, reliable, and context-aware outputs by focusing on structured prompting, effective tool use, and few-shot learning.
Service	Advisory on Prompt Engineering Optimization
Category	AI Development Advisory Services

Advisory on RAG Systems

Item	Description
Description	Get expert advisory on Retrieval-Augmented Generation (RAG) systems. Optimize and evaluate end-to-end pipelines including retrieval strategies, chunking, embeddings or re-ranking to improve accuracy, reliability, and grounded responses.
Benefit	Unlock better outputs from your Large Language Models (LLM). Gain expert guidance on structured prompting, few-shot approaches, and best practices for tool usage. This service provides methodological advisory to help you design prompts effectively and improve LLM performance. The service focuses on methodological guidance and does not include implementation or system integration activities.
Service	Advisory on RAG Systems (Retrieval-Augmented Generation)
Category	AI Development Advisory Services

Trustworthy AI

02

Consultancy on Ethical & Legal AI Self-Assessment

Item	Description
Description	This advisory service helps your organization conduct structured self-assessments of ethical and legal aspects related to AI systems. Gain practical guidance and awareness to identify risks, ensure responsible practices, and make informed decisions.
Benefit	Ensure your AI is trustworthy and responsible. The service provides guidance only and does not constitute legal advice, certification, or implementation of compliance mechanisms.
Service	Consultancy on Ethical & Legal AI Self-Assessment
Category	Trustworthy AI

Trustworthy AI Consultancy

Item	Description
Benefit	Ensure your AI is trustworthy and responsible. Gain expert guidance on safety, fairness, governance, and regulatory considerations. This service provides strategic advisory on frameworks, risk-based approaches, and best practices to support responsible AI development and deployment. The service provides guidance only and does not constitute legal advice, certification, or implementation of compliance mechanisms.
Description	Get expert advisory on trustworthy AI practices, covering safety, fairness, governance, and regulatory considerations to support responsible AI development.
Service	Trustworthy AI Consultancy
Category	Trustworthy AI

Ad hoc AI Services
&
Expert Consulting

02

Ad hoc AI Services & Consulting

Item	Description
Description	Flexible advisory sessions with BSC AI experts. Connect with our specialists for guidance on technical, strategic, or sector-specific AI and data topics. Sessions are tailored to your needs and available across multiple domains depending on expertise and availability. Focus areas include: • General AI & Data Consulting • Health (Data & AI Services) • Climate & Agriculture (Data & AI Services) • Finance (Data & AI Services) • Legal (Data & AI Services) • Energy (Data & AI Services) • Communication & Media (Data & AI Services) • Public Sector (Data & AI Services)
Benefit	Access expert advisory on AI and data topics. Receive high-level guidance across technical, strategic, or sector-specific questions to support reflection and informed decisions without full project engagement. The service focuses on advisory activities and does not include implementation, development, or project execution.
Service	Ad hoc AI Services & Consulting
Category	Ad hoc AI Services & Expert Consulting

Health – Data & AI Expert Services

Item	Description
Description	Develop and validate healthcare AI models securely. Hospitals can leverage BSC developed AI systems to anonymize data, train and test models at scale, and fine tune systems for final training with non-anonymized data in a secure environment.
Benefit	Safely experiment, train, and validate AI models on sensitive clinical data. By leveraging BSC's secure infrastructure, anonymization tools, and high-performance compute, you reduce risk, accelerate innovation, and gain confidence before deploying models in regulated healthcare environments.
Service	AI at Hospitals – Privacy-Preserving Model Development Pipeline
Category	Ad hoc AI Services & Expert Consulting

Climate & Earth - Data & AI Expert Services

Item	Description
Description	Learn how Destination Earth (DestinE) can support climate and environmental decision-making. Receive expert advice on digital twins, AI based climate emulators, and high-resolution simulations to identify use cases and plan next steps.
Benefit	Discover how Destination Earth can support your climate and environmental decisions Our experts provide advisory sessions on climate digital twins, AI based climate emulators, and high-resolution simulations. We help you identify relevant use cases, understand limitations, and define next steps aligned with your organisation's needs.
Service	DestinE Advisory & Climate Digital Twin Briefings
Category	Ad hoc AI Services & Expert Consulting

Language Technology Expert Briefings

Item	Description
Description	Our specialists provide focused sessions on ALIA and BSC's language models, explaining available models, multilingual capabilities, adaptation options, and typical use cases. Gain clarity on what is feasible today and learn how to leverage BSC language AI expertise effectively.
Client Value Proposition	Access expert briefings on Language Technologies. Gain deep, expert-led guidance on ALIA and comparable large language models. Understand model capabilities, multilingual coverage, adaptation strategies, and limitations to make informed decisions on applying BSC's Language Technology assets to real use cases across the public sector, industry, and research avoiding trial and error.
Service	Language Technologies Expert Briefings
Category	Ad hoc AI Services & Expert Consulting

Training & Skills Development

02

Training Course Catalogue

Item	Description
Description	Explore our training offer, organized by audience across six target groups. Use dedicated filters to quickly find courses relevant to your needs. Access complementary materials to extend your learning beyond the session.
Benefit	Develop and strengthen your expertise through a structured and high quality training framework. Access expert-led sessions designed to develop foundational and advanced knowledge in AI-related topics. Curated learning experiences help you and your team upskill efficiently, whether you are senior management, technical or non-technical staff, students, or scientific professionals.
Service	Training Course Catalogue – Scheduled training activities
Category	Training & Skills Development

Learning Platform Online Modules

Item	Description
Description	Access a growing collection of interactive, self-paced modules. Learn at your own pace while building AI-related practical skills relevant to your organization or career.
Benefit	Access high-quality online learning modules at your own pace. Build knowledge in AI-related topics through structured, expert-designed content. These modules support scalable training across organizations.
Service	Learning Platform – Self-paced Online Modules
Category	Training & Skills Development

AI Ecosystem & Engagement

02

Events & Co-Marketing

Item	Description
Description	Showcase your project within the BSC AI Factory ecosystem. Participate in events and co-marketing actions to gain exposure, strengthen credibility, and access to new opportunities.
Benefit	Boost your visibility and credibility through the BSC AI Factory network. Participate in joint events and co-marketing initiatives to increase exposure for your startup, project, or initiative. Leverage the BSC AI Factory brand and ecosystem to reach relevant audiences, strengthen credibility, and connect with potential collaborators or clients.
Service	Events and Co-Marketing
Category	AI Ecosystem & Engagement

Incubation Spaces

Item	Description
Description	Use BSC AI Factory spaces to work, collaborate, network, and exchange knowledge with startups, researchers, and AI partners, accelerating your innovation and connections.
Benefit	Collaborate, connect, and work in BSC AI Factory spaces. Access physical environments designed to foster collaboration, networking, and knowledge exchange among startups, researchers, and AI ecosystem partners, helping you build relationships, share ideas, and accelerate innovation.
Service	Incubation Spaces
Category	AI Ecosystem & Engagement

Enablement
&
Introductory Services

02

Briefing BSC AI Factory initial briefing and customer assessment

Item	Description
Description	Get a single-session overview of BSC AI Factory. Learn about our models, tools, support, training, and incubation services, and discover how to start collaborating on your AI projects
Benefit	Get a clear, actionable overview of BSC AI Factory. Receive a concise, non-technical introduction to the BSC AI Factory project, including the service catalogue and AI resources available at BSC. After a single session, participants understand what tools, models, and services exist, their purpose, and how to start engaging with them. During the session, your organization shares its current status, plans, and AI-related needs. Based on this, we provide a one-page diagnosis and assess your maturity level, giving you a clear starting point for AI innovation.
Service	Briefing about BSC AI Factory and initial customer assessment
Category	Enablement & Introductory Services

Sectoral AI Maturity Assessment Questionnaire

Item	Description
Description	Our simple online questionnaire makes it easy for you to share your project goals, technical details (data, models, AI technologies, tools, and software), and your experience with AI and HPC environments. By providing this information before your first meeting, our Project Manager and AI Experts can better understand your needs and offer tailored guidance from the very start.
Benefit	Share your project goals and AI resources before your meeting so the BSC AI Experts can provide a more personalized and focused discussion tailored to your needs.
Service	Briefing about BSC AI Factory and initial customer assessment
Category	Enablement & Introductory Services

Issuance of BSC AIF certificates

Item	Description
Description	Get BSC AI Factory certificates to validate your participation and expertise, supporting funding applications, collaborations, and professional recognition.
Benefit	Receive certificates confirming your participation in BSC AI Factory programmes. Use them to showcase your involvement, demonstrate expertise, and strengthen applications for funding, collaborations, or other opportunities.
Service	Issuance of BSC AIF certificates
Category	Enablement & Introductory Services

BSC AI Factory partners

Barcelona Supercomputing Center
Centro Nacional de Supercomputación

fct Fundação para a Ciência e a Tecnologia

TÜBİTAK

ICI

Affiliated Entities

UNIVERSITAT POLITÈCNICA DE CATALUNYA
BARCELONATECH

CNCA Centro Nacional de Computação Avançada

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GOBIERNO DE ESPAÑA
MINISTERIO PARA LA TRANSFORMACIÓN DIGITAL Y DE LA FUNCIÓN PÚBLICA

Generalitat de Catalunya
Government of Catalonia

Plan de Recuperación, Transformación y Resiliencia

PRR Plano de Recuperação e Resiliência

REPÚBLICA PORTUGUESA

Financiado pela União Europeia
NextGenerationEU

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