



**Secondo incontro del
Ciclo di seminari di studio**

ENIA 2024

Estrategia Nacional de Inteligencia Artificial

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ENIA 2024 – Estrategia Nacional de Inteligencia Artificial

- **Updates 2020 strategy to adapt to dizzying rate of change**
 - Rests on the effort for pandemic recovery
 - Reorganizes some processes that were under way
- **Vertebrates the activities of the Public Administrations**
- **Promotes use of AI in public and private sector**
- **Aligned on 3 axes and each axis on several levers**
 - Axis 1: IA capacity reinforcement
 - Axis 2: Ease IA application in public and private sector
 - Axis 3: Promote transparent, ethical, humanistic AI

Axis 1: IA capacity reinforcement

- **Lever 1: Invest on supercomputation**
- **Lever 2: Create capacity for sustainable datacenters**
- **Lever 3: Public language models and corpus**
- **Lever 4: Promote talent in AI**

Axis 1 Lever 1: Invest on supercomputation

- Reinforce supercomputation for AI
 - Marenostrum 5 upgraded to 450 petaflops
 - Participation in EuroHPC
- Significantly increase supercomputing resources available to industry
 - Up to 20% supercomputing capacity awarded to industry
- Reinforce Red Española de Supercomputación
 - National alliance of supercomputing, data and IA services
 - Strategic plan ending 2024 will be renewed and expanded

Axis 1 Lever 2: Create capacity for sustainable datacenters

- Spain is attracting world-class infrastructures
 - Climate, strategic location, leading-edge connectivity, renewable energy availability
- ENIA will drive momentum of sustainable datacenters with
 - Continued investment in key infrastructures
 - National strategy to balance territorial deployment and resource usage.
 - Leading transposition of EU Energy Efficiency directive and guidelines
 - Push creation of standards for green AI
 - Create seal of quality for sustainable AI

Axis 1 Lever 3: Create public language models and corpus

ALIA

- A set of public foundational language models
 - 7B to 175B parameters
 - In a variety of configurations,
 - Includes domain-specific models for efficiency in specific tasks
 - A testbed for innovations, continually improved
- A high-quality corpus of data in Spain's national languages
 - Built to train and tune ALIA models
- Infrastructure and processes to evaluate language models
 - Fix current lack of extensive evaluation datasets
 - Develop benchmarking techniques for bias detection, compared performance, environmental footprint.
- Available to public administrations and private companies

- Technologically led by BSC
- Regional and national cultural institutions providing linguistic expertise
- Panhispanic collaboration through ASALE (Asociación de Academias de la Lengua Española)

Axis 1 – Lever 4: Promote talent in AI

- Building on past initiative (600M€ investment)
 - Value Chains – Integrating IA in enterprise value chains
 - R&D&I projects in health, agriculture, energy
 - RETECH: Territorial investments digitalization
- New projects financed through with 300M€ from FEDER, including
 - National Quantum Computing Strategy
 - National Plan for Green Algorithms
- 120M€ in research scholarships on IA and Digital Enabling Technologies
- 30M€ in IA training for digital professionals
- Promote university graduate and master degrees and vocational training on IA
- Implement competence-based HR management and career development in public Administration.

Axis 2: IA in public and private sector with innovation and cybersecurity

- Lever 5: Promote IA in the public sector
- Lever 6: Help expand IA in private sector, especially SMEs
- Lever 7: Develop cybersecurity framework

Axis 2 Lever 5: Promote IA in the public sector

- Direct correlation between public service quality and economic growth
- ENIA 2024 leverages AI to improve service quality, nearness to citizens
 - Helping decision making in public policies
 - Improve efficiency and efficacy of administrative process
 - Social analysis and problem detection
 - Improved services with easier interaction
- Secretaría General de Administración Digital (SGAD) leads transformation
 - Optimizing technical and human capacities
 - Acquiring and deploying technological assests
 - Ensuring inclusion, data protection and information security
- Agencia Española de Supervisión IA provides thinktank and supervision

Axis 2 Lever 5: Promote IA in the public sector

- SGAD hosts GovTech use-case incubator for the public administration
 - 20M€ to develop innovative solutions
 - Public entities propose use cases
 - Selected cases developed in cooperation with private sector and research establishments.
 - Cases in development will have fast-track to Sandbox
 - AESIA will ensure compliance with good practices, AI Act and sectorial regulations.
- SGAD deploys common administration services based on public IA models
 - Make SGAD a hub to make services available to the whole Administration
 - Central service management will help massive adoption
- SGAD enacts common Administration data governance
 - Common framework to simplify sharing data of different types from disparate sources
 - Handling administrative data and documentation
 - Providing curated data for specialized IA models
 - Ensuring quality, interoperability, and cybersecurity
 - Ensuring compliance with ethical and legal standards

Axis 2 Lever 6: Expand IA in private sector, especially SMEs

- IA expansion must include SMEs and the self-employed
- An entrepreneurial innovation ecosystem must also be promoted
- Public sector initiatives to promote adoption of IA in enterprises
 - IA in SME: 350M€ in AI-augmented digital services for SMEs, like
 - Customer relations management
 - Business process optimization
 - Data analysis and visualization
 - Kit Consulting: 300M€ in professional IA assessment to SMEs
 - IA entrepreneurial ecosystem development (400M€)
 - Finance to startups and scaleups developing innovative AI solutions
 - Direct financing or through investment funds
 - Secure infrastructure for specific-purpose IA training (300M€ shared with lever 4)
 - Enable development of small, specialized models developed from national language models
 - Help create ecosystem of language model-oriented SME
 - Offer secure environment, with access to resources and tools to assure quality and trustability

Axis 2 Lever 7: Develop cybersecurity framework

- Tight CS is a must for critical infrastructures and essential services
- Public and private sectors alike
- Both in prevention and response
- Spain will build on its 3rd position in European CS (UN figures)
 - New CS law
 - Governance framework for national CS
 - Coordination between public and private actors
 - Establish policies, processes, organization structures, supervision
 - Promote entrepreneurial ecosystem of IA in CS
 - 12M€ to promote innovation and collaboration on IA in CS
 - 48M€ for government acquisition of technology through INCIBE
 - Promote professorships in AI+CS in public and private universities

Axis 3: Transparent, responsible, humanistic AI

Lever 8: Develop Agencia Española de Supervisión IA (AESIA)

- Ensure AI systems deployed in Spain are secure, ethical, responsible
- Think & Do Tank
 - Modeled on other IA thinktanks (like UK Centre for Data Ethics and Innovation, or Stanford HAI)
 - Create knowledge, training and publicity on trustworthy AI
 - Analyze and track trends, innovations and new developments.
 - Gather intelligence on frontier AI and its risks
 - Participate with their experience in public policies
 - Host sectorial and thematic discussion forums
 - Publish reports and guides
- Supervise responsible, innovative IA deployment
 - Be the national market supervision authority of high-risk systems and apply penalties when necessary
 - Participate in European and national standards for evaluation
 - Participate in development of codes of conduct
 - Ensures Spanish national language models comply with the highest standards
 - Deploy the Spanish AI sandbox
 - Deploy seal of quality to demonstrate trustability of non-high-risk systems
 - Provide assessment to developers and deployers
- Be an international reference in AI
 - Participate in international forums like UN, G20, OCDE
 - Represent Spain in the EU AI Committee
 - Share knowledge and IA assets with latin america

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Thank you for your
attention!

Cambios

Fecha	Versión	Autores	Resumen
20200719	0	IRT	Copia de presentación para ProMIS Torino Winter school, para adaptar a ENIA2 Eliminadas referencias a sandbox
20240722	1	IRT	Resumen extenso de ENIA 2024
20240722	2	IRT	Eliminado detalle para la presentación visual (usar v1 como referencia)