The NanoCommons e-infrastructure – A quick guide to the „what and how" of nanoinformatics in safety assessment suiting basic to expert users in academia, industry, and regulatory authorities

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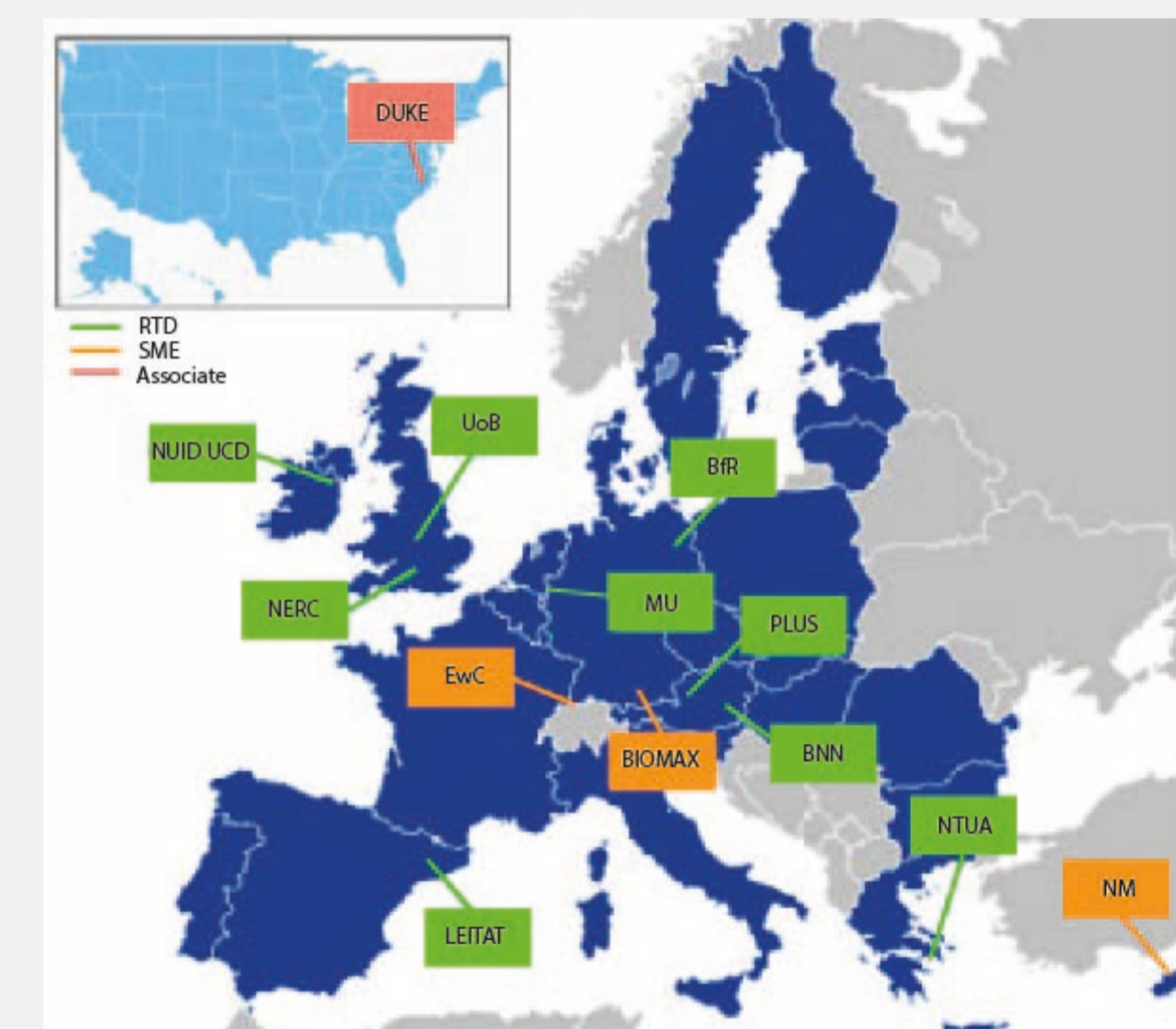
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Background

Nanotechnologies and the resulting novel and emerging materials (NEMs) represent major areas of investment and growth for the European economy. Recent advances have enabled confidence in the understanding of what constitutes toxicity of NEMs in relation to health and environmental hazards. However, the nanotechnology and nanosafety communities remain disparate and unconnected, whilst knowledge and data remain fragmented and inaccessible.
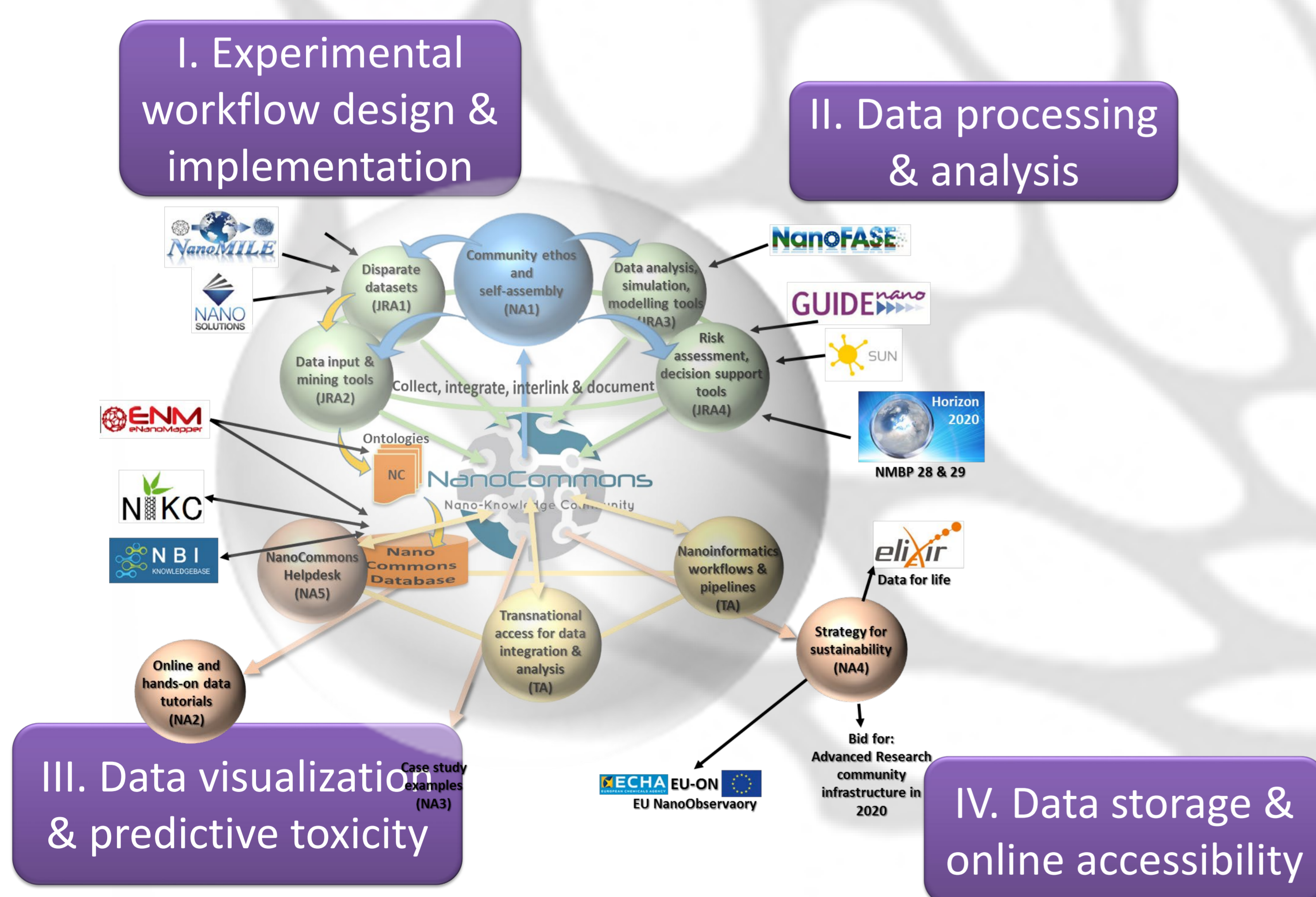
Aim

NanoCommons is a research e-infrastructure project offering access to high quality nanoinformatics tools and services for nanotechnology and nanosafety stakeholders (academia, industry, regulators). It is user-led, offering and developing the services needed by the user community of nanotechnology, nanosafety and related fields. NanoCommons is built on **3 main pillars**: joint research activities, networking activities and transnational access (TA) services.

NanoCommons consortium

The NanoCommons' TA service categories & available online training tools

TA service category	Nanoinformatics services	Training formats	Level
Experimental workflow	PC characterization protocols	Written tutorial	Basic
Data processing & analysis	Biomax data templates	Recorded webinar	Basic
	NIKC data templates	Written tutorial	Advanced
	Jaqpot platform	Demo video	Advanced
		Demo video	Expert
	Enalos NanoXtract for TEM image analysis	Demo video	Basic
		Online tutorial	Basic
	Biocorona in silico modelling	Recorded webinar	Advanced
	OpenRiskNet e-infrastructure	Recorded webinars incl demo videos	Basic
		Recorded webinars incl videos and documentations	Advanced
Data visualization & toxicity prediction	Enalos cloud for zeta potential	Demo video	Basic
		Recorded webinar	Basic
	Enalos cloud for Safe-by-Design	Demo video	Basic
		Online tutorial	Basic
	Guidenano	Recorded webinar	Basic
Data storage	Scinote	Demo video	Basic
		Online tutorial	Basic
	ACEnano knowledge infrastructure	Online tutorial	Basic

TA services are designed to promote **data FAIRness** (Findable, Accessible, Interoperable, and Reusable). NanoCommons provides innovative solutions for data mining, harmonisation, utilisation and re-utilisation, including incorporation of a range of modelling and decision support tools that require and/or can produce organised, high-quality datasets.

More info on TA: ☞ helpdesk@nanocommons.eu
www.nanocommons.eu

For access to services, info resources & events:
☞ www.infrastructure.nanocommons.eu