DestinE Platform

BRINGING EARTH'S DIGITAL TWIN TO LIFE: EXPLORING THE DESTINE PLATFORM

Your Gateway to a Sustainable Future

Matteo Cortese
Maintenance & Evolution Manager - Serco Italia S.p.A.
(matteo.cortese@serco.com)

BIG DATA FROM SPACE 2025, 29 September - 3 October 2025

Destination Earth
Funded by the European Union
Implemented by ECMWF esa EUMETSAT

Climate Change
Adaptation

What-now
What-next
What-if

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Digital Twins
EuroHPC Simulations

European Commission initiative that aims to develop a digital model of our planet

Environmental
man-made damage
prediction

Anticipate extreme
events & adapt
policies to climate-
related challenges

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DESTINE SYSTEM OVERVIEW

THE POWER OF OUR ECOSYSTEM

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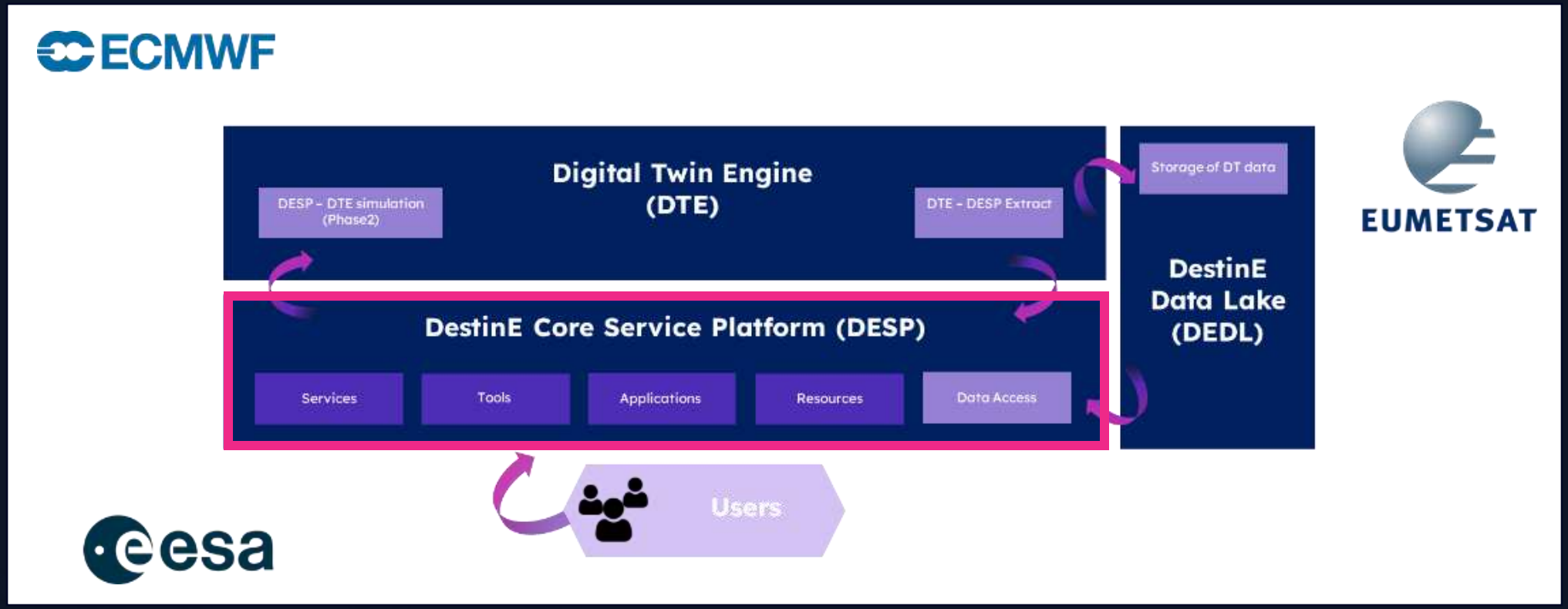
A collaborative and comprehensive ecosystem delivering the Destination Earth initiative.



The DestinE Platform is an **ecosystem** of Services provisioned by ESA and operated by Serco Italia and its partners.

YOUR JOURNEY WITH DESTINE PLATFORM

A SEAMLESS EXPERIENCE

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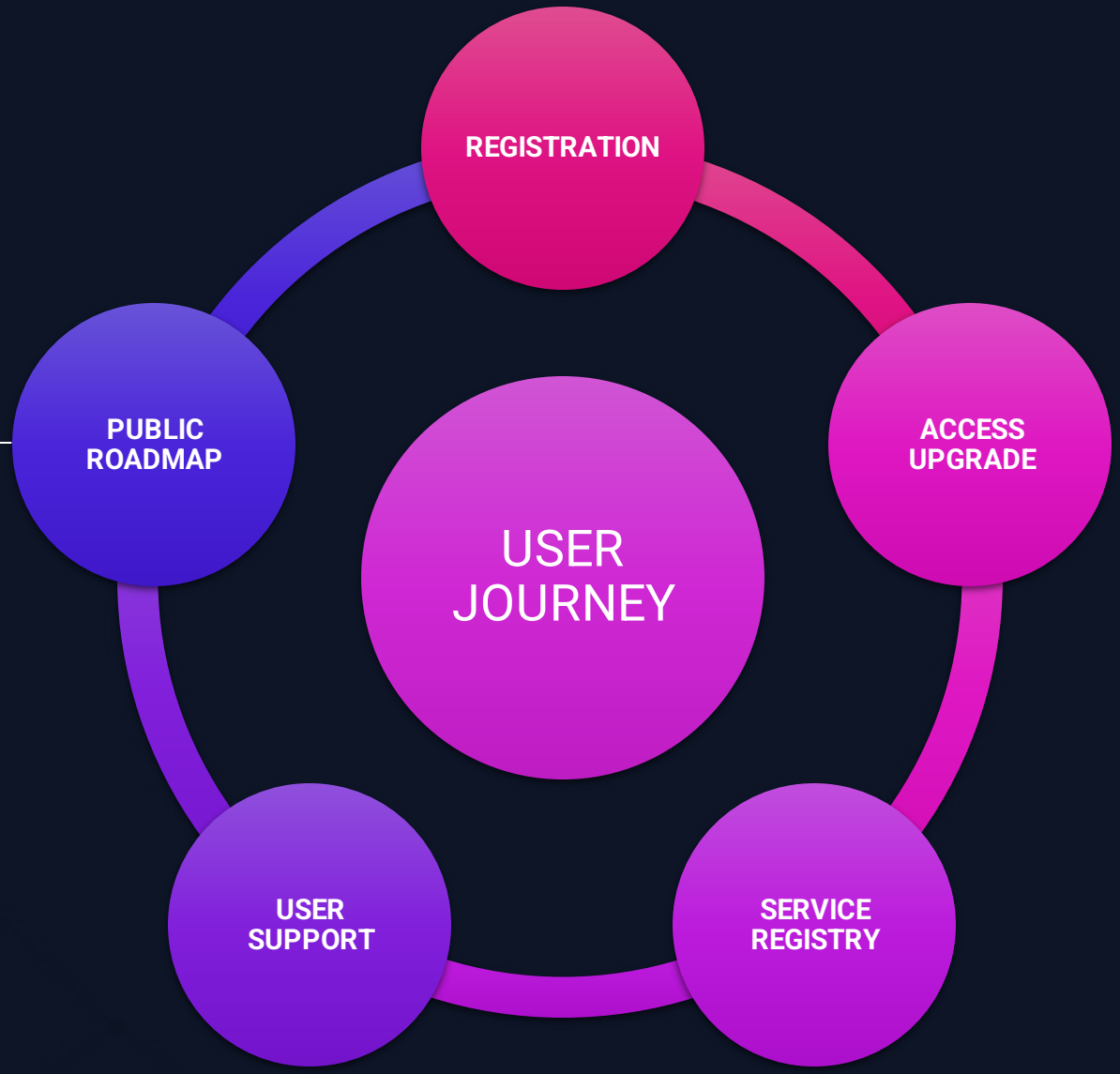
Steps are interconnected to create a seamless user experience.



SERVICE REGISTRY – DISCOVERING DESTINE'S CAPABILITIES

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A RICH ECOSYSTEM OF OPERATIONAL SERVICES

VISUALISATION
- Explore datasets visually
- Immersive storytelling
- Streamlined processing

DATA WORKFLOW
- Access to DestinE data
- Data Cache service

DATA ANALYSIS AND MODELLING
- AI-driven solution
- Building/running workflows
- Monitor/anticipate activities

DEVELOPMENT ENVIRONMENT
- Ready-to-use environments
- Notebooks

PROCESSING ENVIRONMENT
- Advanced processing via UI/API
- Build code & configuration via UI

Catalogue guiding users to:

- Access and exploit data
- Discover DestinE applications
- Access DestinE data on the edge
- Identify Beta Testing services
- Discover Coming Soon services

27

Services already available

Discover

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SERVICE REGISTRY – NAVIGATING AND FILTERING SERVICES

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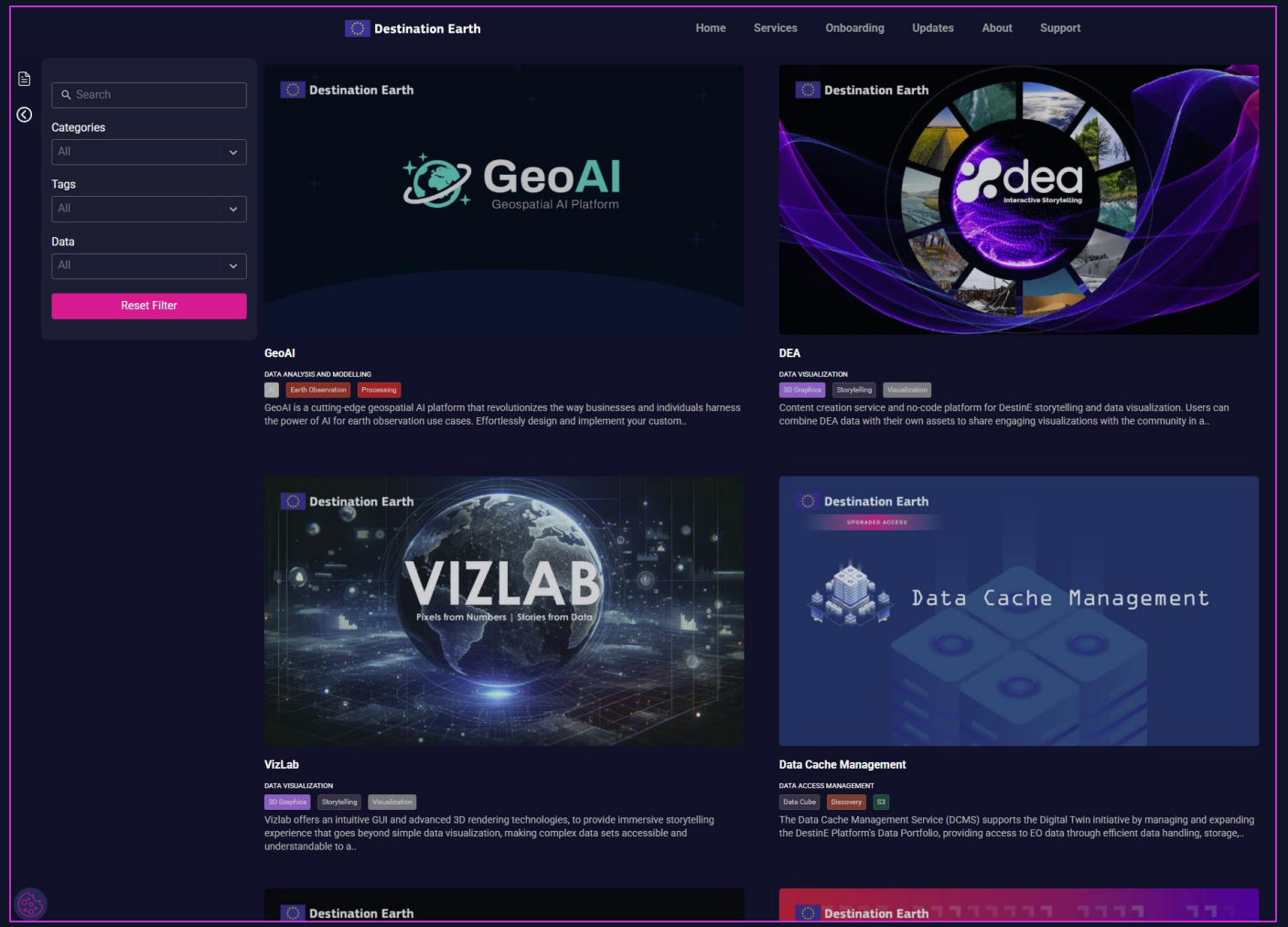
EFFORTLESS DISCOVERY: SEARCH & FILTER

How to find Services:

- **Search**
  Quickly find services using keywords.
- **Filter by Category**
  Narrow down results by service type (e.g., “Data Visualization”, “Data Access Management”).
- **Filter by Tags**
  Use keywords for precise thematic searches (e.g., "Digital Twins," "Climate," "COG").
- **Filter by Data**
  Explore services linked to specific data.



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FROM ACCESS TO BIG DATA PROCESSING

POLYTOPE & DESTINE DATA LAKE

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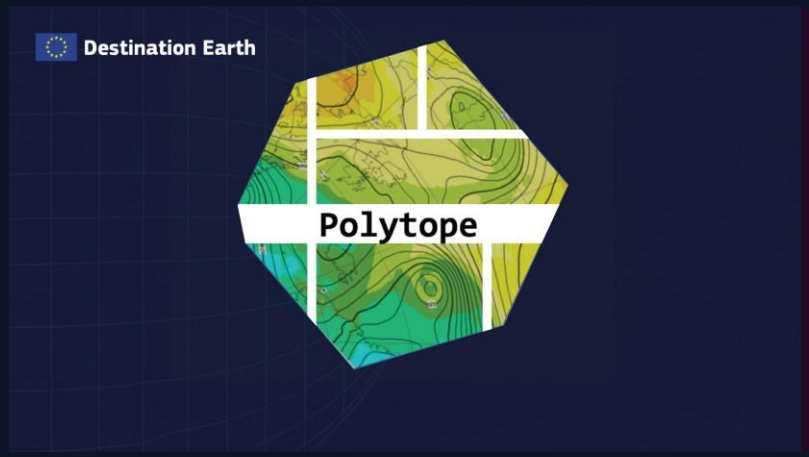

- Federated access to multidimensional data
- Extract only what you need → Reduce data movement
- Supports low-latency applications

- Discovery, access, and big data processing
- Near-data processing → ML/AI-ready
- Federation with diverse external sources

STREAMING AND CLOUD-OPTIMISED DATA

DESTINESTREAMER & EARTH DATA HUB

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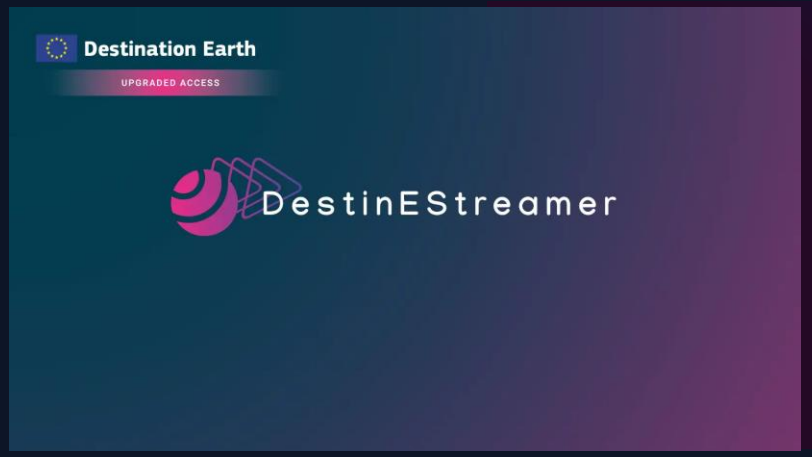

- In-browser big data processing
- WebAssembly + Compression for speed
- Trend curves in seconds

- STAC-compliant catalogue
- Zarr → cloud-optimised, analysis-ready
- Easy combination across datasets

ADVANCED ANALYTICS AND INSIGHTS

INSULA

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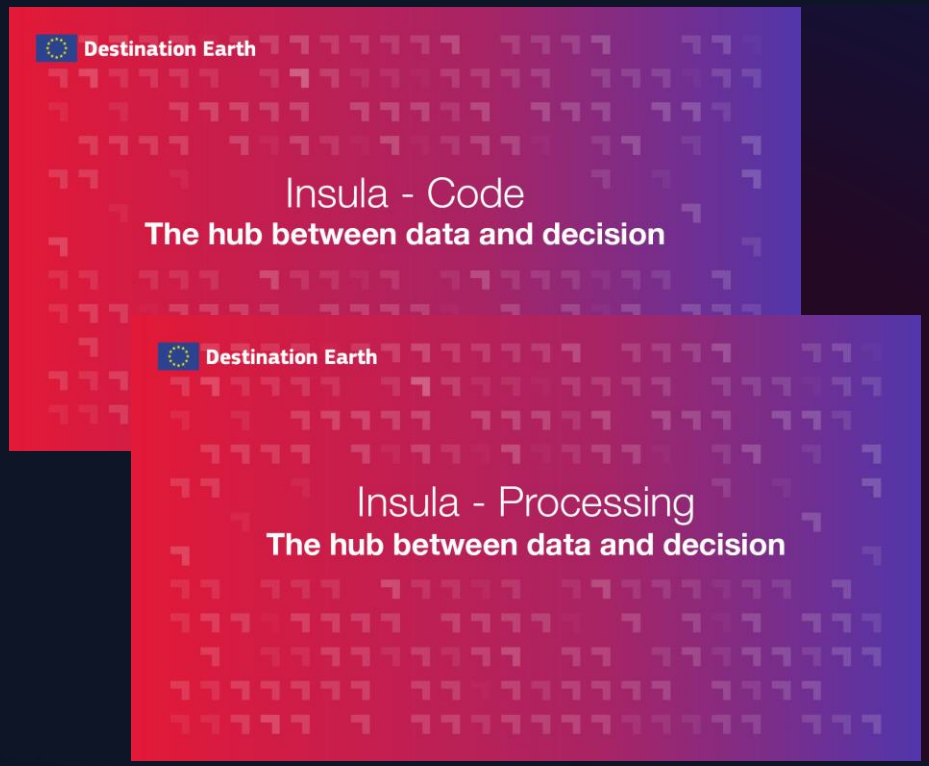

- User-friendly big data analytics
- Trend analysis, anomaly detection, predictive modelling
- Real-time monitoring & Autoscaling
- Combine data & services for actionable insights

USER SUPPORT – YOUR PARTNER IN SUCCESS

COMPREHENSIVE SUPPORT FOR A SMOOTH EXPERIENCE

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- **FAQs:** Browse frequently asked questions on the Web Portal Support Section.
- **SERVICE DOCUMENTATION:** In-depth guides for each service.
- **SERVICE DESK:** Direct assistance via the ‘Contact Us’ Form.
- **VIDEO TUTORIALS, WEBINARS, DEMONSTRATORS, RESOURCES**: Access comprehensive learning materials on DestinE Platform Learning Hub.

PUBLIC ROADMAP – CO-CREATING THE FUTURE OF DESTINE

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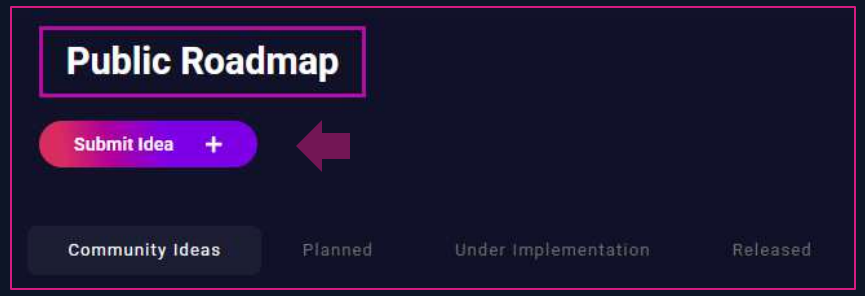
YOUR VOICE, OUR DIRECTION: THE DESTINE PUBLIC ROADMAP

platform.destine.eu/roadmap/

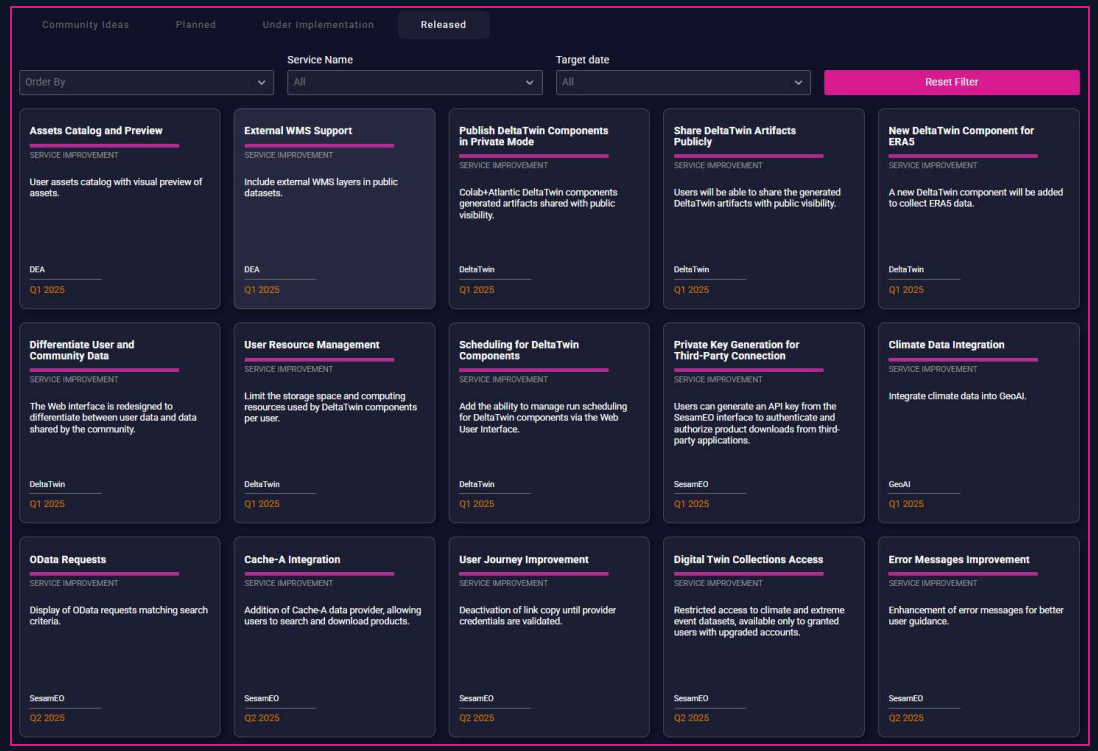


Why it matters

Ensuring transparency and enabling continuous improvement based on user needs.

Key Sections:

- **Community Ideas**: Submit your innovative ideas for new features and improvements. Your input directly influences our development priorities.
- **Planned Features**: Explore detailed information on upcoming services, target implementation dates, and planned enhancements.
- **Released Features**: Stay updated on recently launched services and functionalities, now live and in operation.



THE DESTINE PLATFORM COMMUNITY – LEARN, CONNECT, CONTRIBUTE

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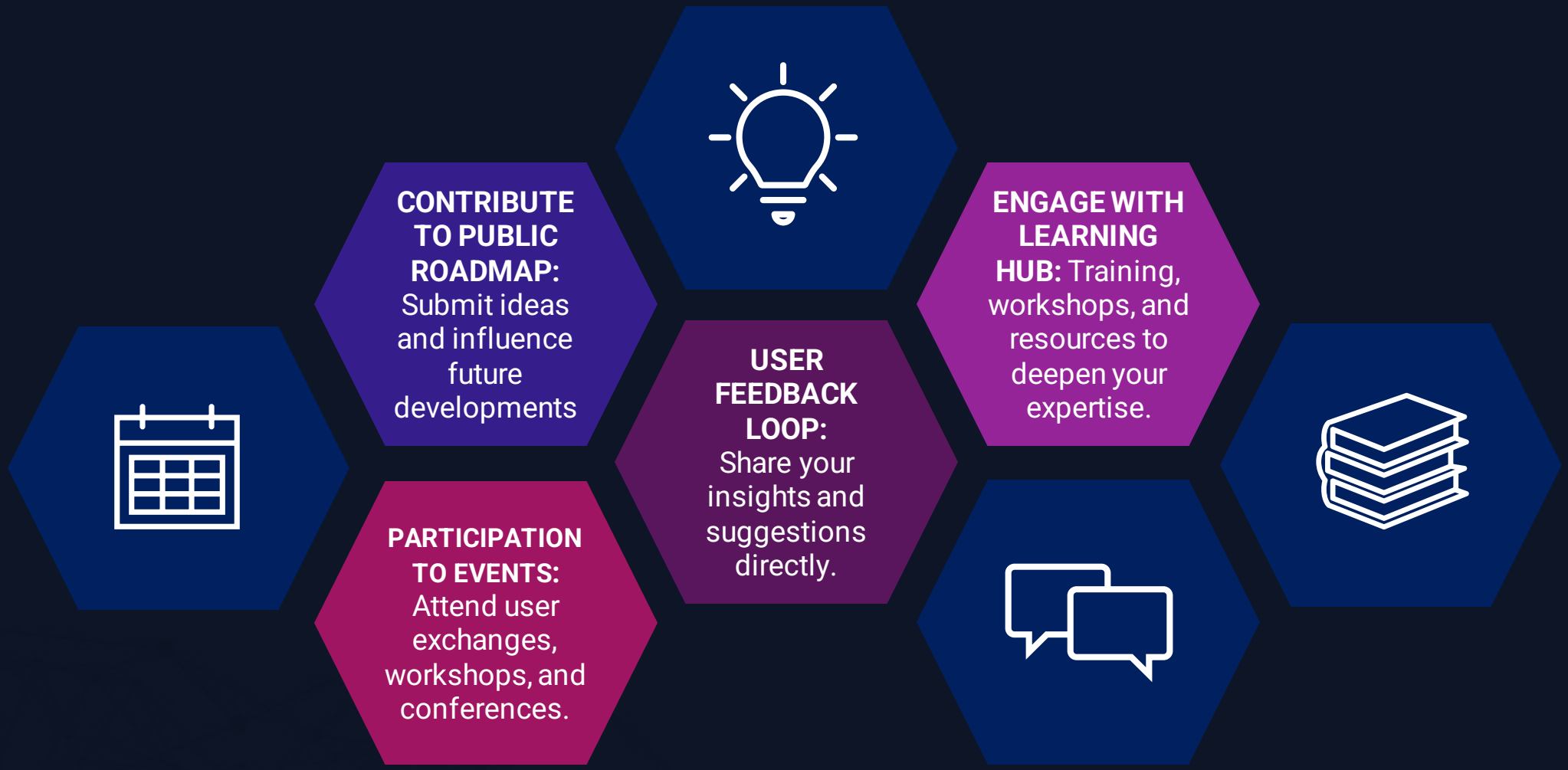
ENGAGE WITH DESTINE PLATFORM



THE DESTINE PLATFORM COMMUNITY GROWTH & THE ROAD AHEAD

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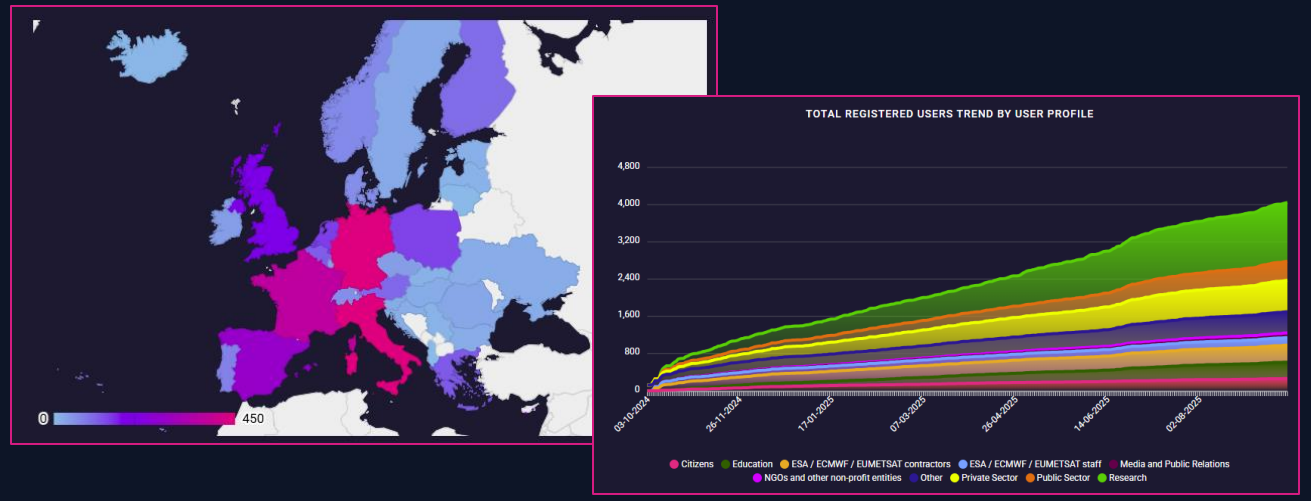
ENGAGING USERS ACROSS EUROPE AND BEYOND

platform.destine.eu/destine-platform-dashboard/



- Registered Users
- Visitors since launch
- Operational Services
- Service Onboarding Requests

What's Next?

- Forum Launch → end of 2025
- Expansion → 54 onboarding requests
- Sustainability Metrics → Energy & Carbon reporting

Your engagement is key to shaping the future of DestinE.

DestinE Platform

Thank You!

platform.destine.eu

DON’T WAIT:
REGISTER NOW
AND BEGIN YOUR
JOURNEY!

serco | aliaspace | B-Open | CGI | deimos elecnor group | exprivia | FlyPix AI | GAEL SYSTEMS | GeoVille | MEEO | Trust-iT services | neuralio ARTIFICIAL INTELLIGENCE | OVHcloud | ThalesAlenia Space

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