

## Round table 5: IJI e-services and disruptive technologies for NIS research session Integration within LifeWatch ERIC Tesseract VRE



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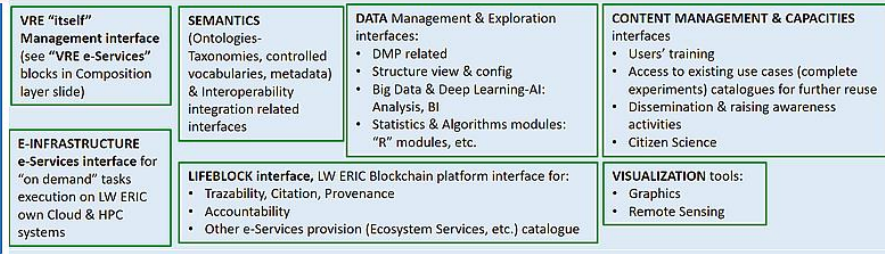
LifeWatch ERIC  
Tesseract

# Conceptual Architecture

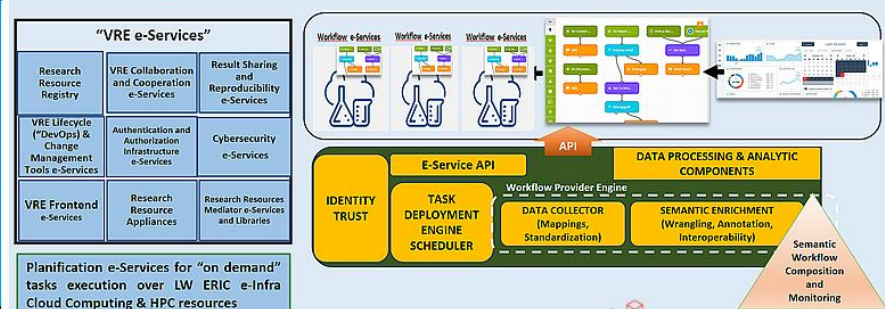
User Level



APPLICATION Layer



e-Services COMPOSITION Layer



LW ERIC e-Infrastructure Layer



Resources Layer



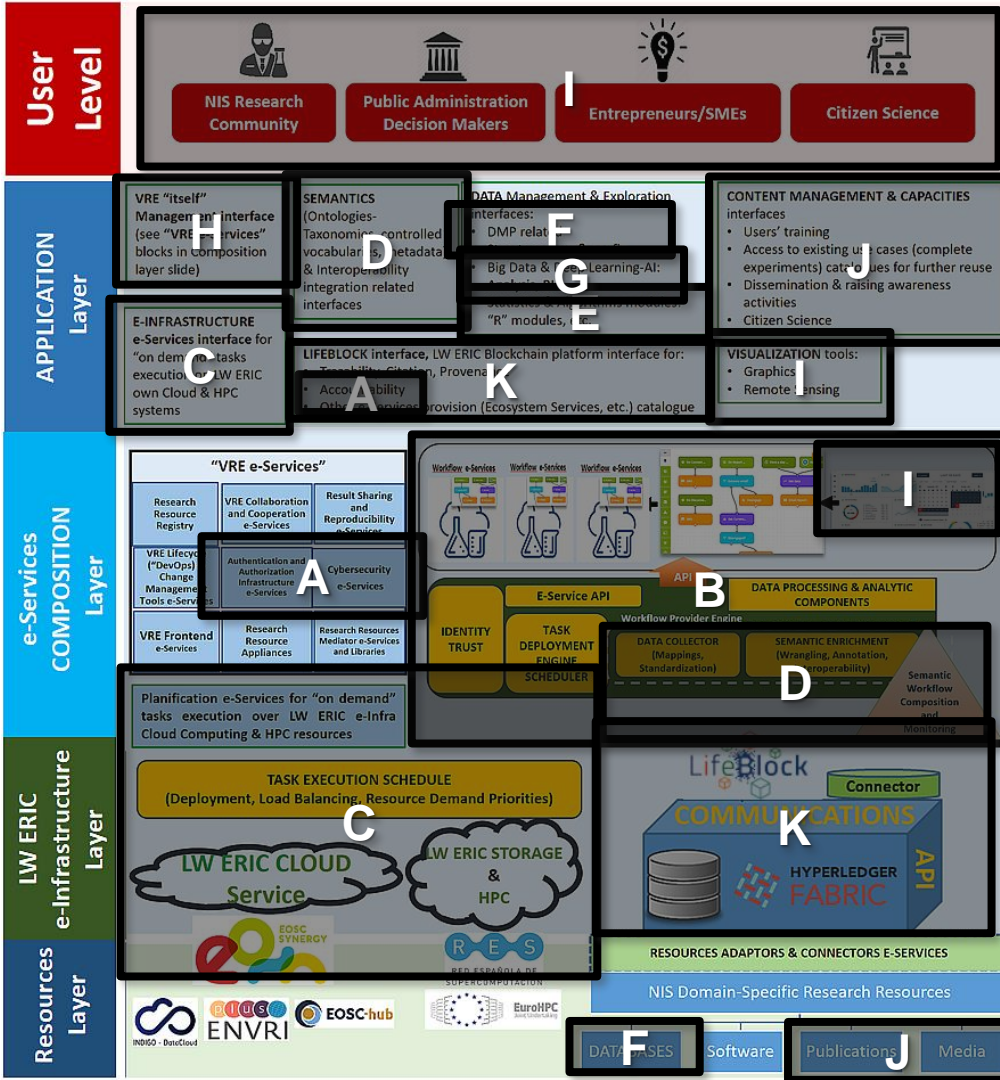
DATABASES   Software   Publications   Media



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Tesseract

# 11 Working Groups

- WG A:** Providing AAI & cybersecurity components. Backend of accountability
- WG B:** Linking every of the workflows to Tesseract VRE in the form of a Workflow Catalogue
- WG C:** Providing “on demand” e-Services to Cloud –EOSC– & HPC (RES-EuroHPC) resources
- WG D:** Providing semantics applications & e-tools interface (including taxonomic backbone)
- WG E:** Providing statistics packets (R, Jupiter python-based, etc.) virtual labs interface (apart from their proper integration into workflows themselves)
- WG F:** Providing DMP and external databases access mechanisms (INTERNAL TO APPS & ADMINS, e.g., see point k. LifeBlock)
- WG G:** Big Data & AI-Deep Learning applications for Modelling
- WG H:** Providing VRE management components (INTERNAL TO APPS & ADMINS)
- WG I:** Providing visualization: GIS-Remote Sensing & graphical analytic: KPI & socioeconomic impact visualization, including EBVs & ecosystem services analysis tools
- WG J:** Providing interfaces to online Training Seminars; “Success case studies”; Dissemination (publications, media) thematic-related resources (e.g. on NIS-IAS); and links to thematic-related Citizen Science activities
- WG K:** LifeBlock: Transparent to users, not existing any “specific” interface, but embedded to all of system e-Services provided. Therefore, cross-cutting to previous a. to j. set of components (INTERNAL TO APPS & ADMINS)





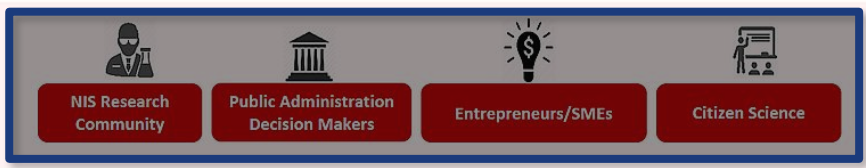
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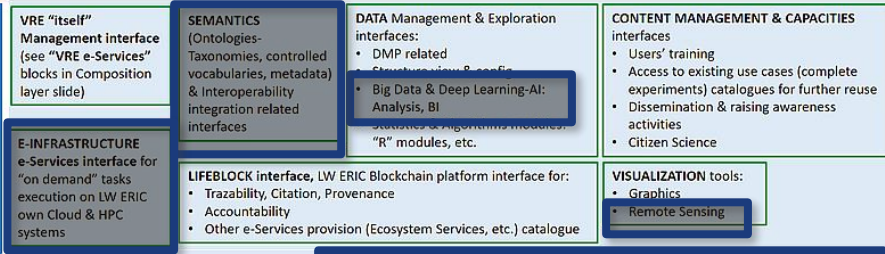
# No-surprise Conceptual Integration

- LifeBlock (-chain)
- EBVs, Remote Sensing Workflows-related
- Semantics & Ontologies
- High Performance Computing & EOSC(loud) synergy
- Big Data
- User-friendly interfaces
- Artificial Intelligence-Deep/Machine Learning for Remote Sensing

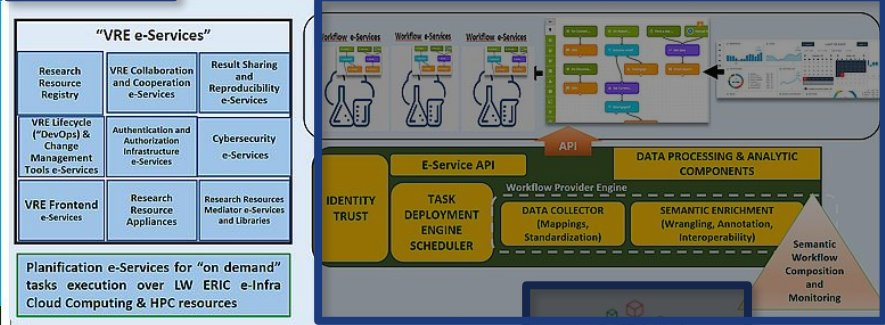
User Level



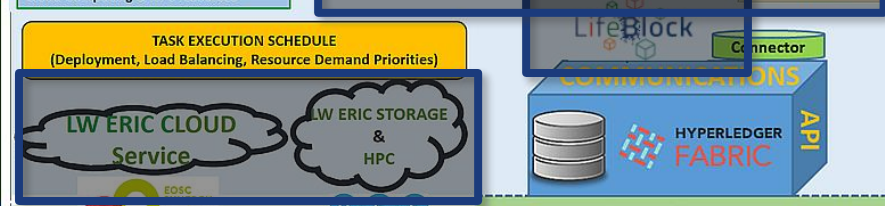
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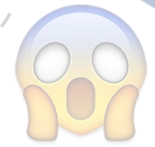
Resources Layer



DATABASES Software Publications Media



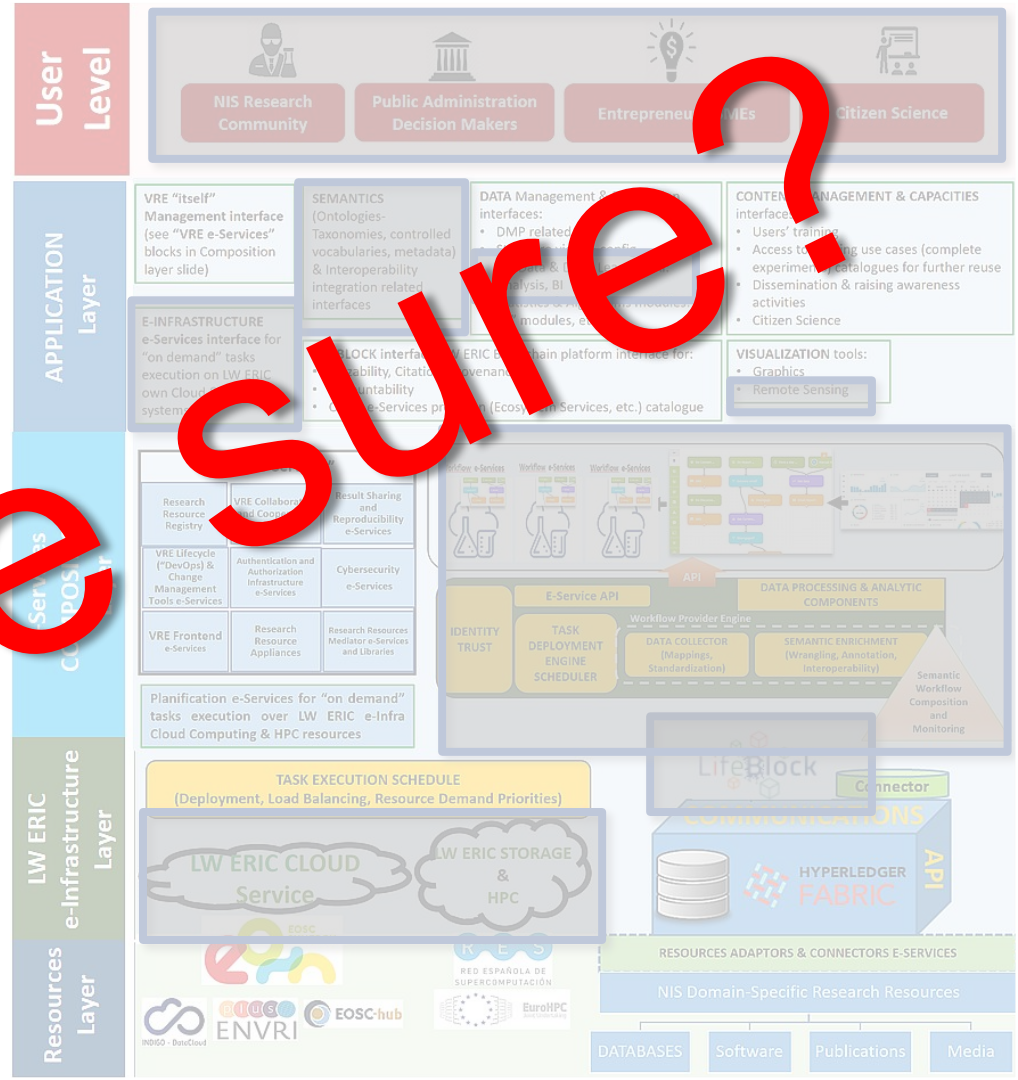
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# No-surprise Conceptual Integration

- LifeBlock (-chain)
- EBVs, Remote Sensing Workflows-related
- Semantics & Ontologies
- High Performance Computing & EOSC(loud) systems
- Big Data
- User friendly interfaces
- Artificial Intelligence-Deep/Machine Learning for Remote Sensing

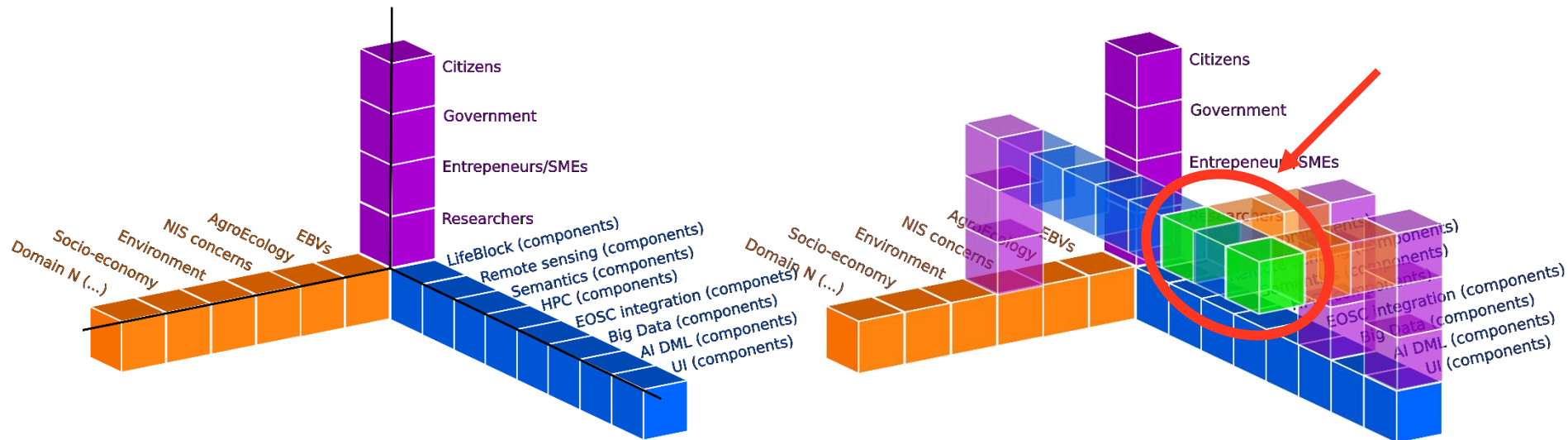
# Are we sure?



# What do/don't we want?

- ❌ Poorly integrated systems
- ❌ Wasting our budget, time and effort developing components without clear applicability
- ❌ Mismatches in development milestones
- ✅ Tested components in production
- ✅ Access to functionalities as soon as possible
- ✅ Continuous refinements and improvements

## Development process guided by **clear-goal use-cases\***

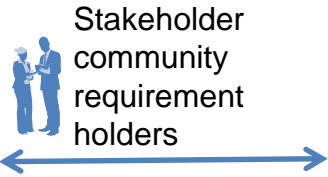
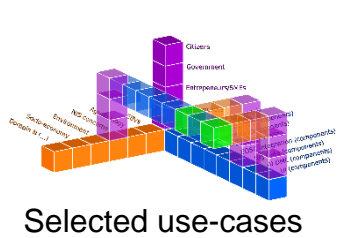


\*As we are doing for IJI NIS development

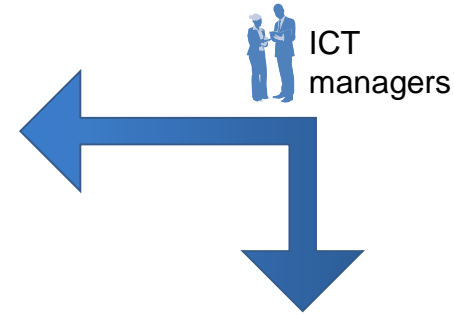
We need those cases (for example from Andalusian ERDF projects)



# And of course the rest of best practices



- ICT external ticketing system at LwOS Desk
- Shared folders at LwOS Workdrive
- Online meetings



ICT managers

ICT internal ticketing system

Managed Services



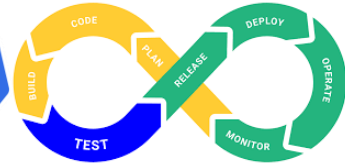
Managed PaaS



Managed IaaS



Kanban



Repositories CI/CD



Training material



Deployed functionalities associated to use-cases



# Thanks!

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