Listen to Community Requirements

Exploring options towards EUDAT next data services

Morris Riedel et al.

Juelich Supercomputing Centre
(on behalf of Peter Wittenburg)

Track 4 – New Services
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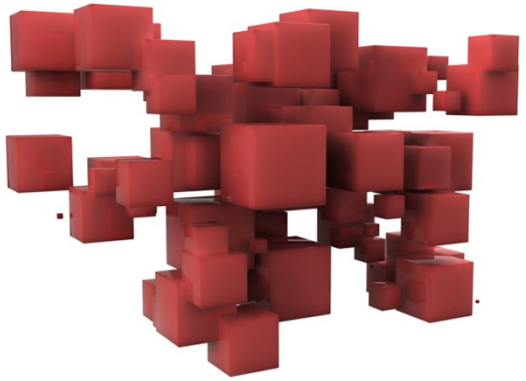

SEVENTH FRAMEWORK PROGRAMME

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Outline

- What we mean with ‘Listen’
- EUDAT Services
- Surveys and Working Groups
- Porential New Service Areas
- Summary

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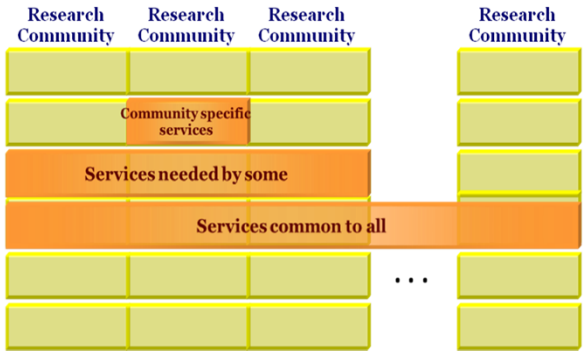
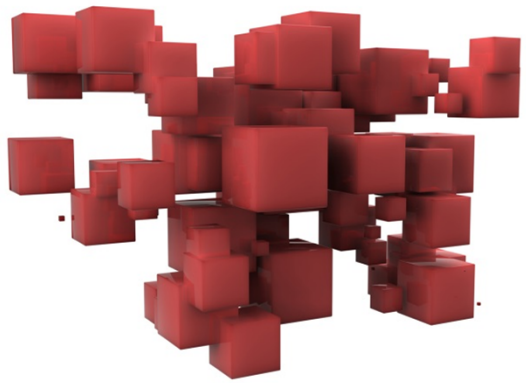
Listening to Requirements of Communities





Common Services	CLARIN	LW	VPH	ENES	EPOS	INCF	ECRIN	Bio Vel	Dixa	CESSDA	DARIAH	Pan Data	BBMRI	EMSO
Safe Replication	X	o	X	X	X	X			x		x			
Data Staging	o	o	X	X	X									
SimpleStore	X	X	X	X	X	x	x	x	x	x	x		x	
Metadata	X	X	o	X	x	x	x	x	x	x	x	x	x	x

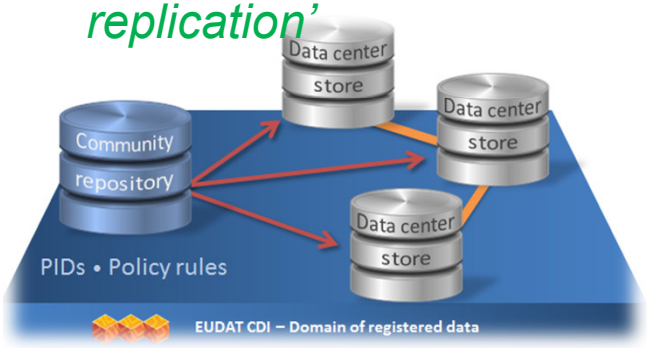
Current and New EUDAT Services

➢ What potential new services are needed?

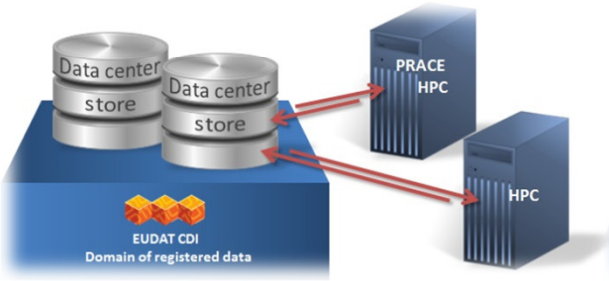
❖ *trusted & simple ad-hoc data sharing with limited number of researchers ('Dropbox')*

✓ *'metadata management'*

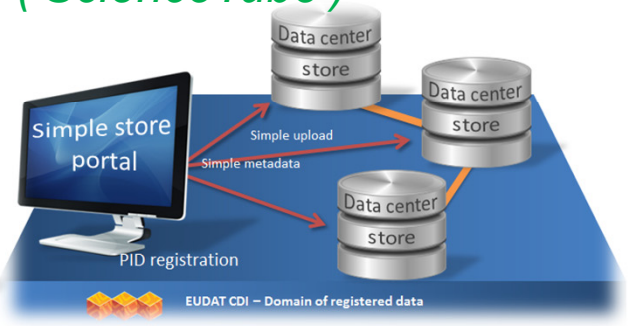
✓ *'trusted replication'*



✓ *'smart transfer to & from computing'*



✓ *'organized simple broad sharing' ('ScienceTube')*



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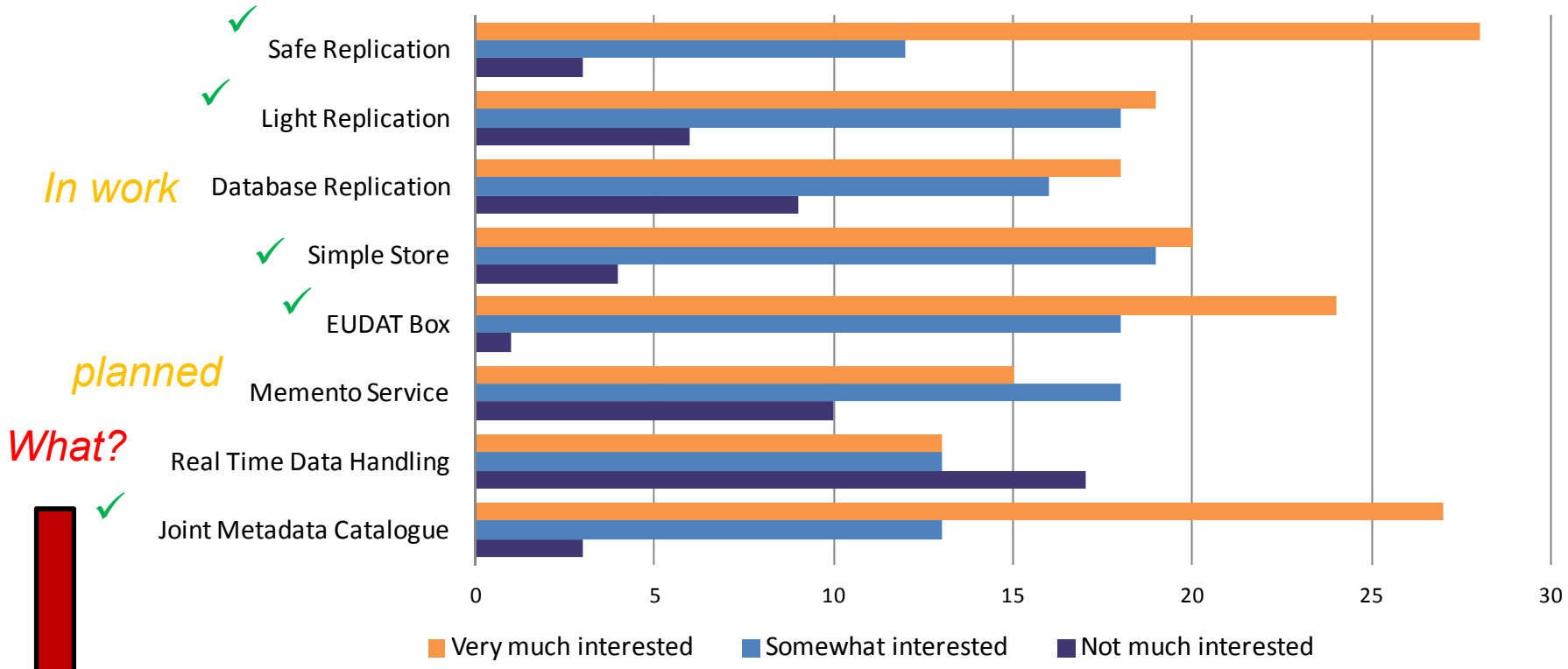
Apart from Discussions: Surveys



Requires a deeper understanding of what needs to be done
→ Forming working groups…

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Forming Working Groups

- Not all is *aaS → Bring together…
  - Domain experts in identified interested fields
  - EUDAT-related community representatives
  - EUDAT technologists
- Discuss the challenges and opportunities associated with potential common services across communities
- Reach consensus on the ‘common services’ that will be of most benefit to research communities in their work.
- Series of events
  - **EUDAT Workshop Days, Barcelona, 25.09.– 26.09.2013**
  - Community events, e.g. American Geophysical Union Assembly 2013

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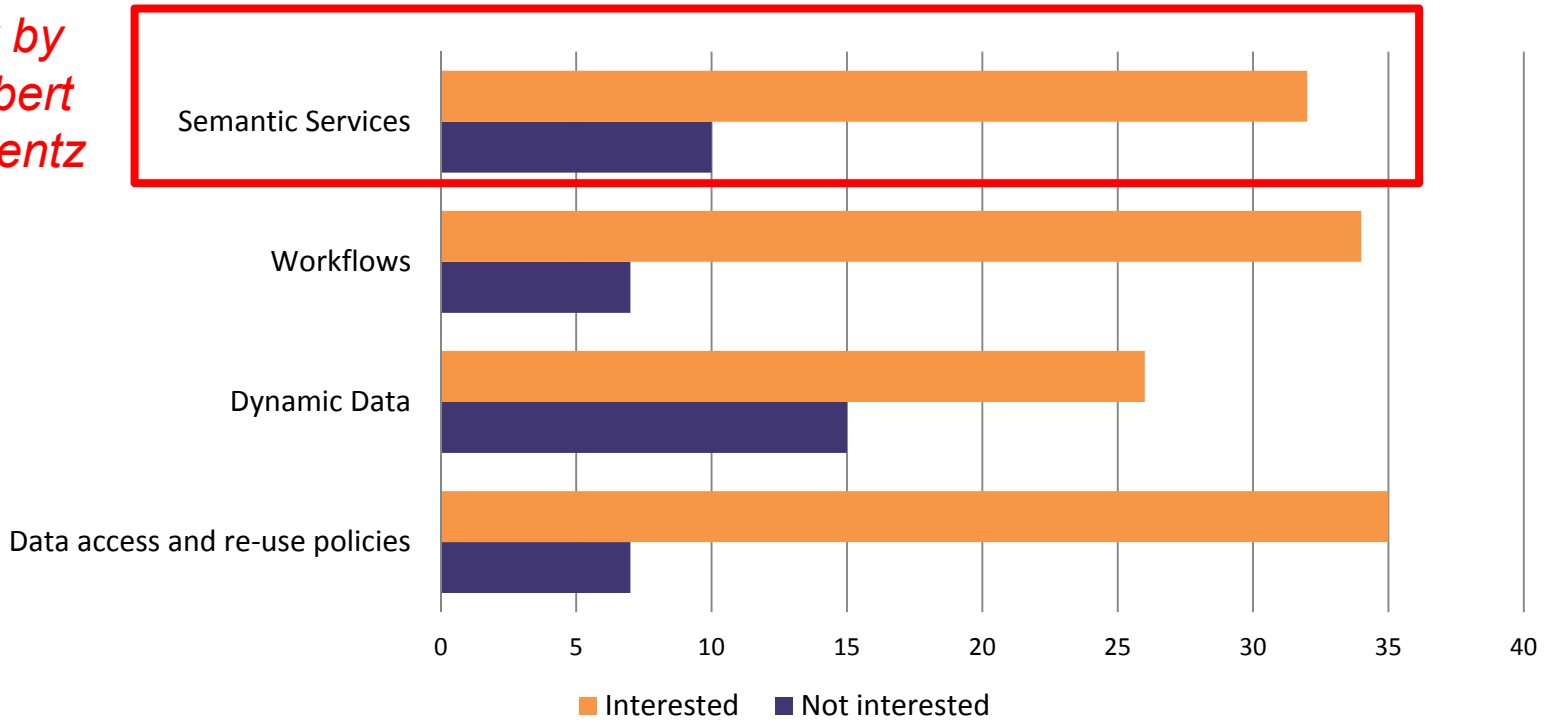
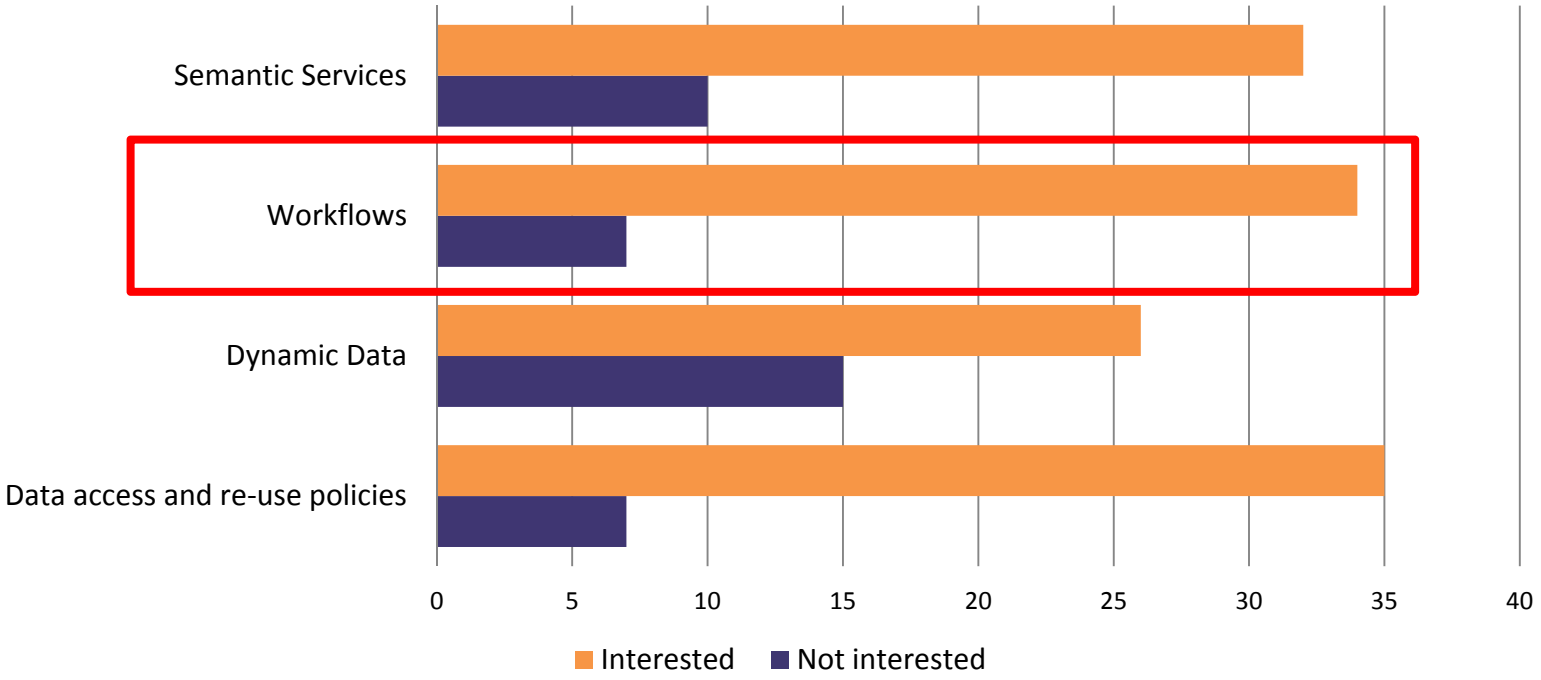
Increase Understanding in Working Groups

Talk by Herbert Schentz



- *Areas could lead to different types of 'new services' → team up with domain experts*

Understanding Workflows



Understanding Workflows

- Understanding the needs of community experts in terms of common services in the area of *'workflow support'*
  - The focus was on common services supporting researchers who need to orchestrate data processing chains (workflow components)
  - E.g. Execute them on computers close to where their data is located.
- ~20 workshop participants have been international experts in the field of 'scientific workflows' (also from DataONE)
  - *'common workflow services elements' related to workflow provenance, APIs for re-use of EUDAT services in workflows, statistics/data mining workflow elements*

➢ *If interested, ask us for the report or join the group!*

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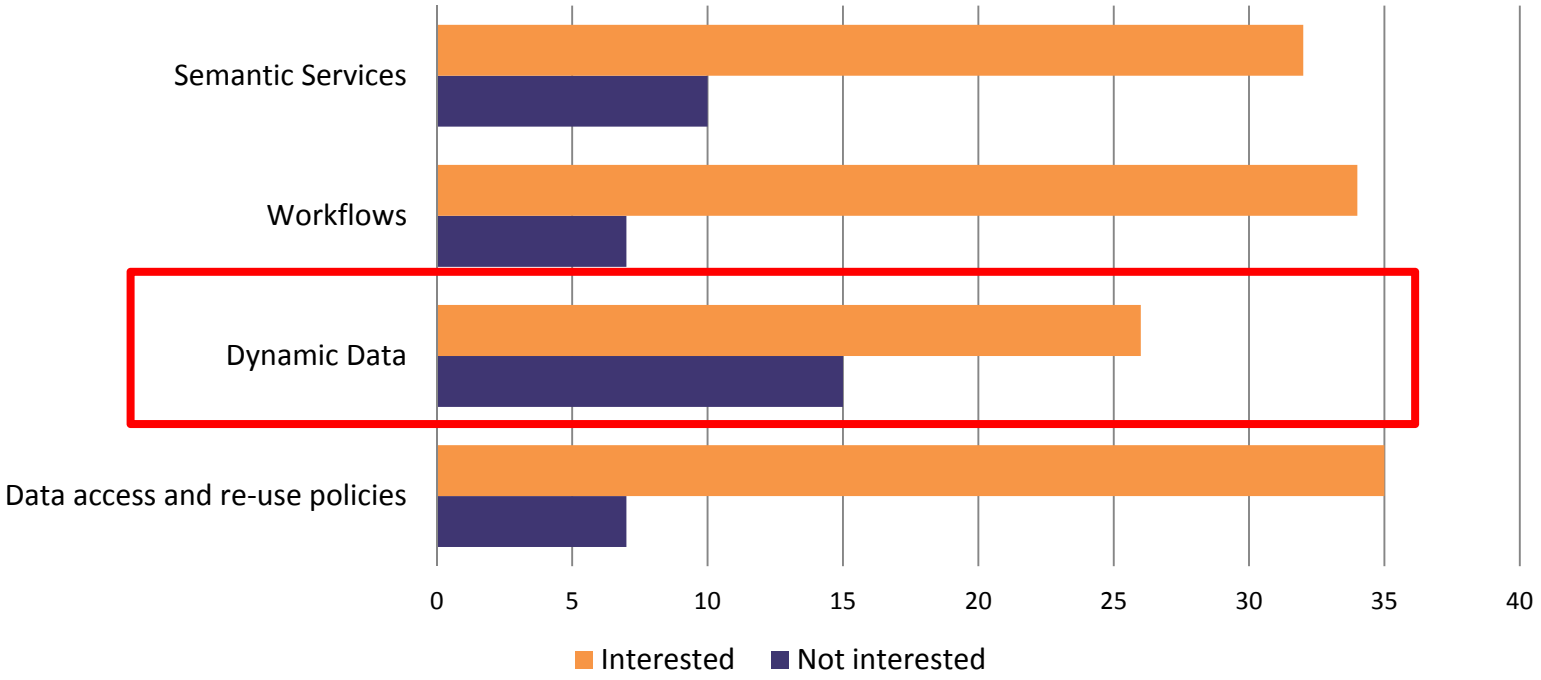
Understanding Dynamic Data



Understanding Dynamic Data

- Understanding common services for Dynamic Data…
  - … addressing real-time data produced by remotely connected field sensors
  - … addressing real-time data from massive crowdsourcing data generated via mobile devices
- Understanding how to overcome challenges
  - Data streams that may be temporarily incomplete
  - Data that may consequently fill up over time (automatically or after manual intervention)
  - Data can be filled up at random moments (special ‘data peek event’ → e.g. crowdsourcing)

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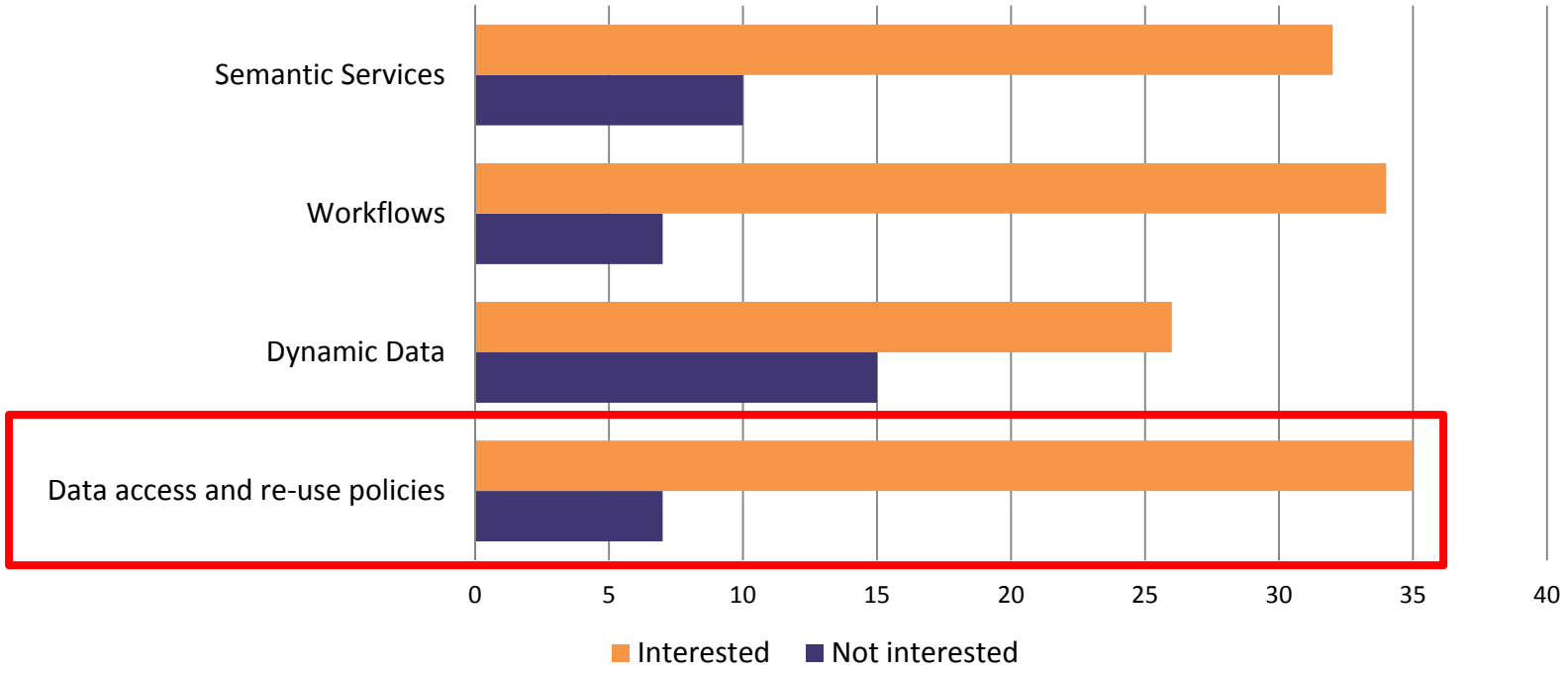
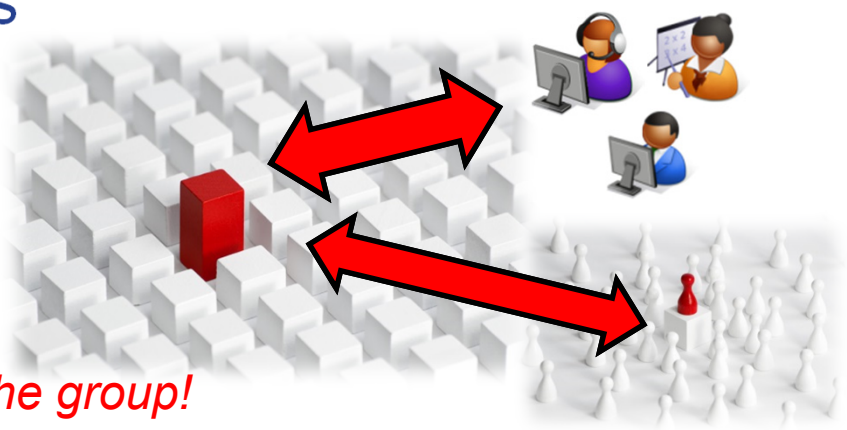
Understanding Data Access & Policies



Understanding Data Access & Policies

- Data access and reuse policies must be made clear
  - … to potential users of data infrastructures
  - … the “data providers” – who need to know how their data will be made accessible and who will be able to access it
  - … the “data customers” – who need to know about access or reuse restrictions before starting working with any of this data
- Discuss common approaches
  - Specify principles regarding open data access and reuse by maintaining data origins and data generator visibility



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Summary

- EUDAT services are based on community requirements
  - Already in production or well understood to move towards it
- New EUDAT services are based on community requirements
  - Some of them are well understood and already prototypes are started (e.g. replication of MediaWiki ‘database’)
  - Others require more elaborative discussions with domain experts
- Working groups together with domain experts
  - Four areas identified where ‘some type of services’ might emerge
  - Started Working Groups: Semantic services, Workflow Support, Dynamic Data, Data Access and Re-use Policies

➢ *If interested, ask us and get involved shaping EUDATs future!*

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services
measurement
within
fusion
new
funding
Policy-based
concepts
device
Analysis
forms
cross-disciplinary
resources
Centre
climate
Computer
expertise
year
like
Computational
Test
E.g
Computing
disciplines
results
Approaches
construction
Fusion
Enable
different
Cross-Disciplinary
EU
methods
High
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PB
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Environment
Modelling
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HPC
large-scale
Juelich
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datasets
acquisition
compute
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Climate
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AR5
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access
hundreds
Nutshell
Services
management
DLCLs
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