Core & Federation in EOSC Future

Establishing the Minimum Viable EOSC
Preparing for “The Nodes”!

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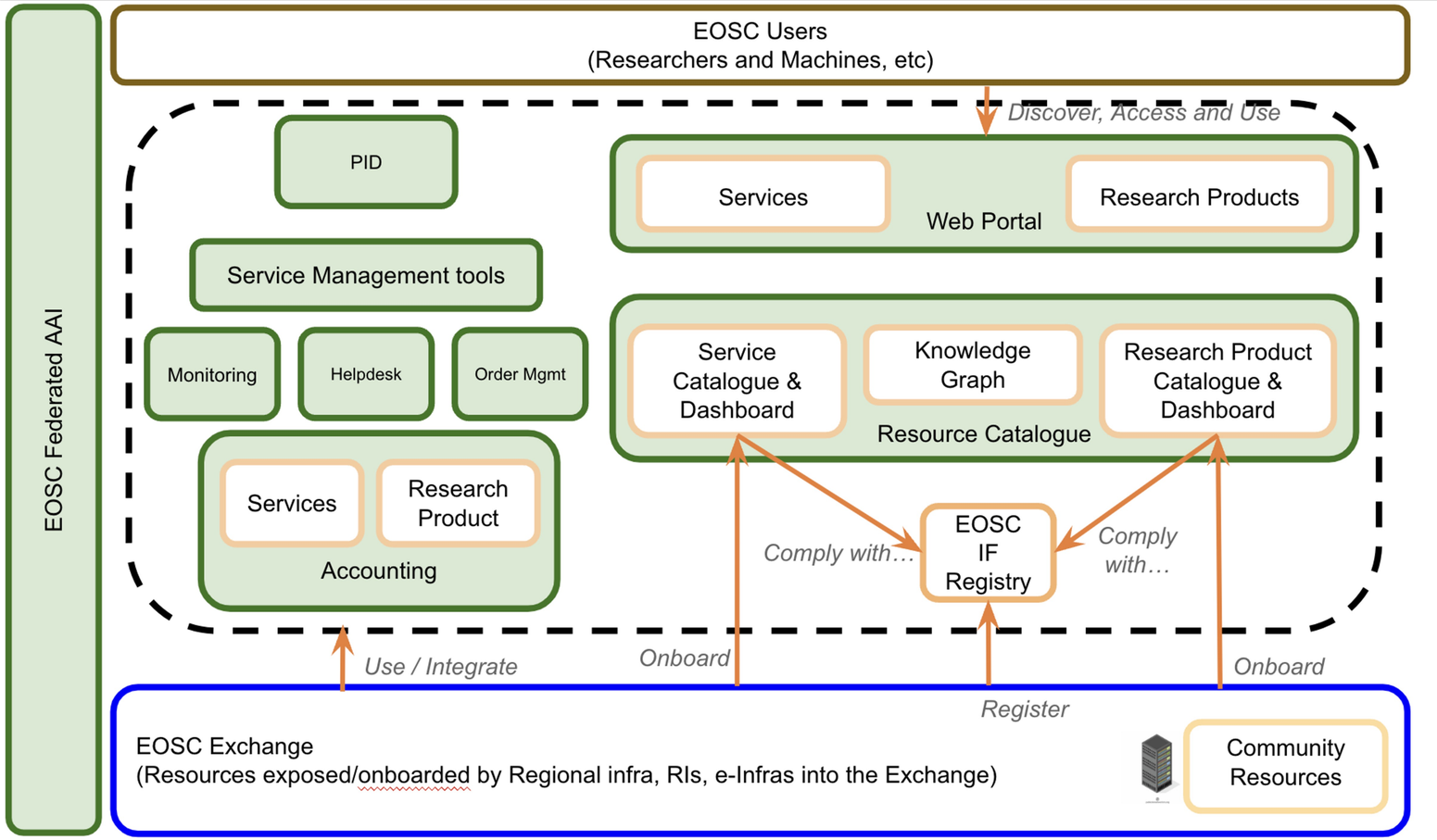
The Starting Point

Core vs. Exchange

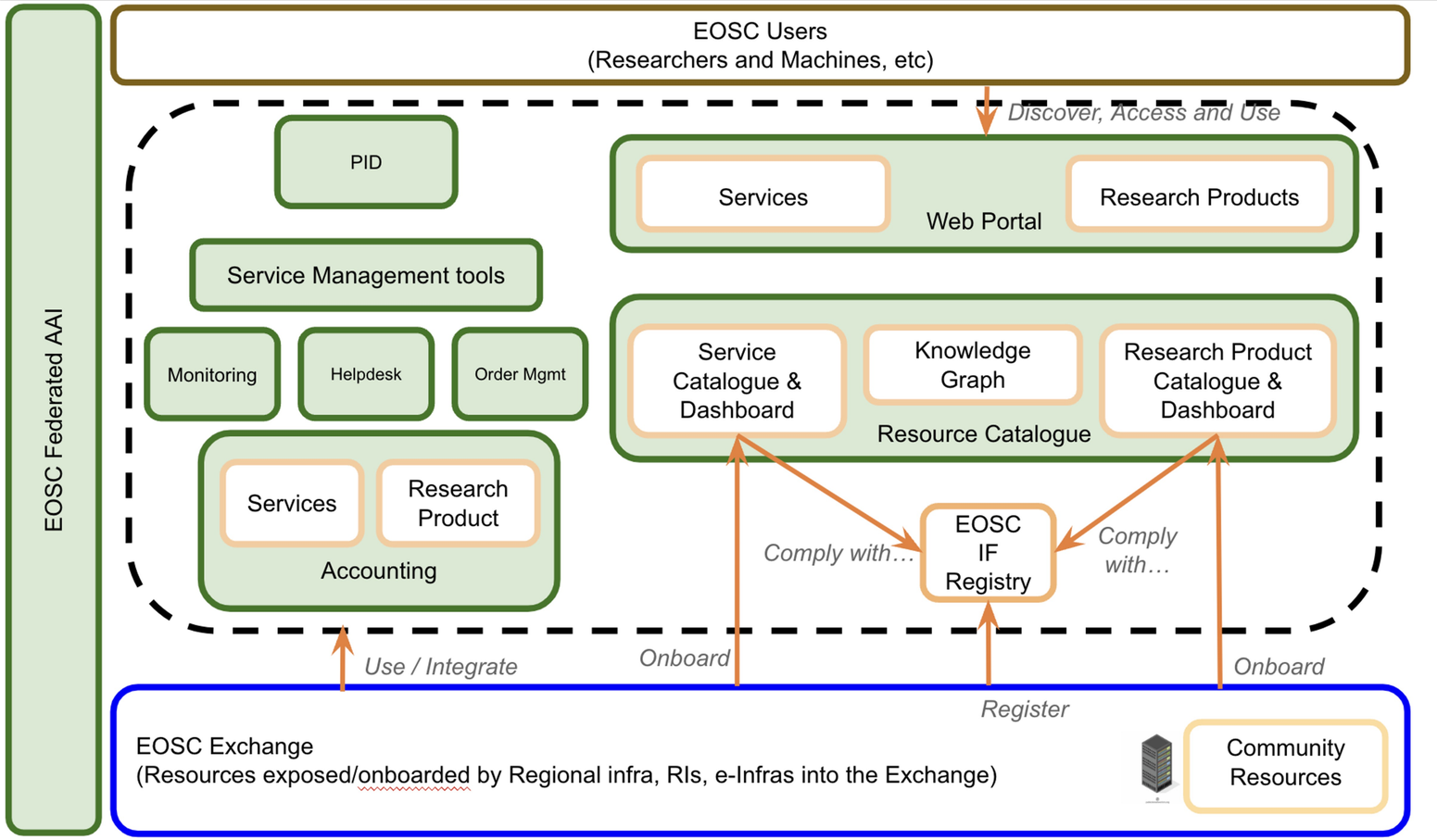
Actual Resources come from RIs, communities, etc.

- "Home" communities remain responsible – and accountable – for their assets and services.
- EOSC Core Services work to enable findability, accessibility, and interoperability.
- The Interoperability Framework (IF) plays an important role in this.



EOSC Future as the initial “Minimum Viable EOSC”

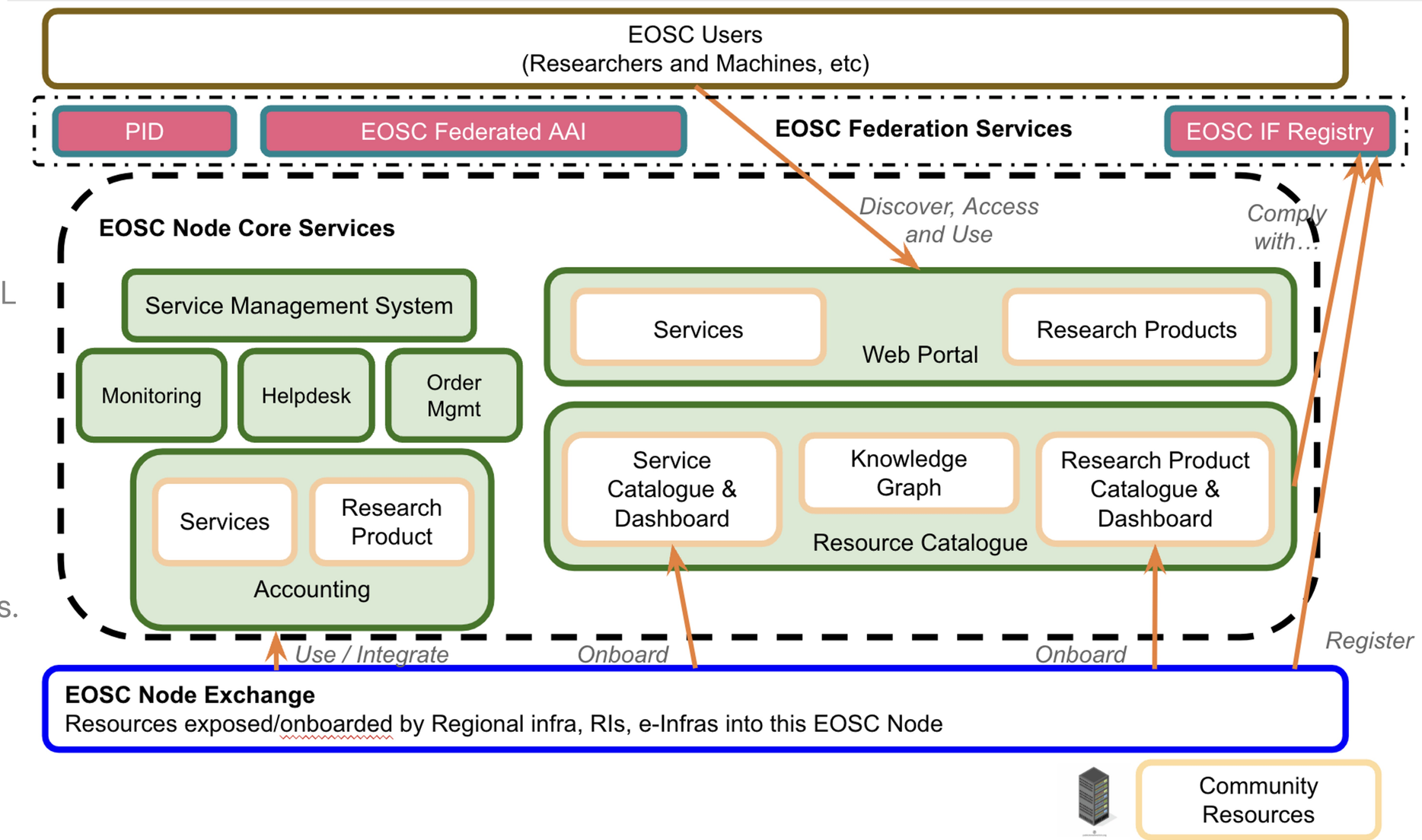
- Integrating the Core functions in EOSC Future was challenging.
- In the end it established the specification for the EOSC Procurement.
- *More work is needed!*
- That work becomes more complex when we think about the requirements of a federated, Node-based architecture.



Categorizing EOSC Services to be ready for new Node concepts

Nothing new here – just rearranging the pieces

- Several functions are likely to operate OUTSIDE the Nodes, as critical Federation Services supporting ALL future Nodes of EOSC.
- Resources onboarded to EOSC, remain under the control of their providers. The EOSC Exchange merely provides pointers or links to those resources.



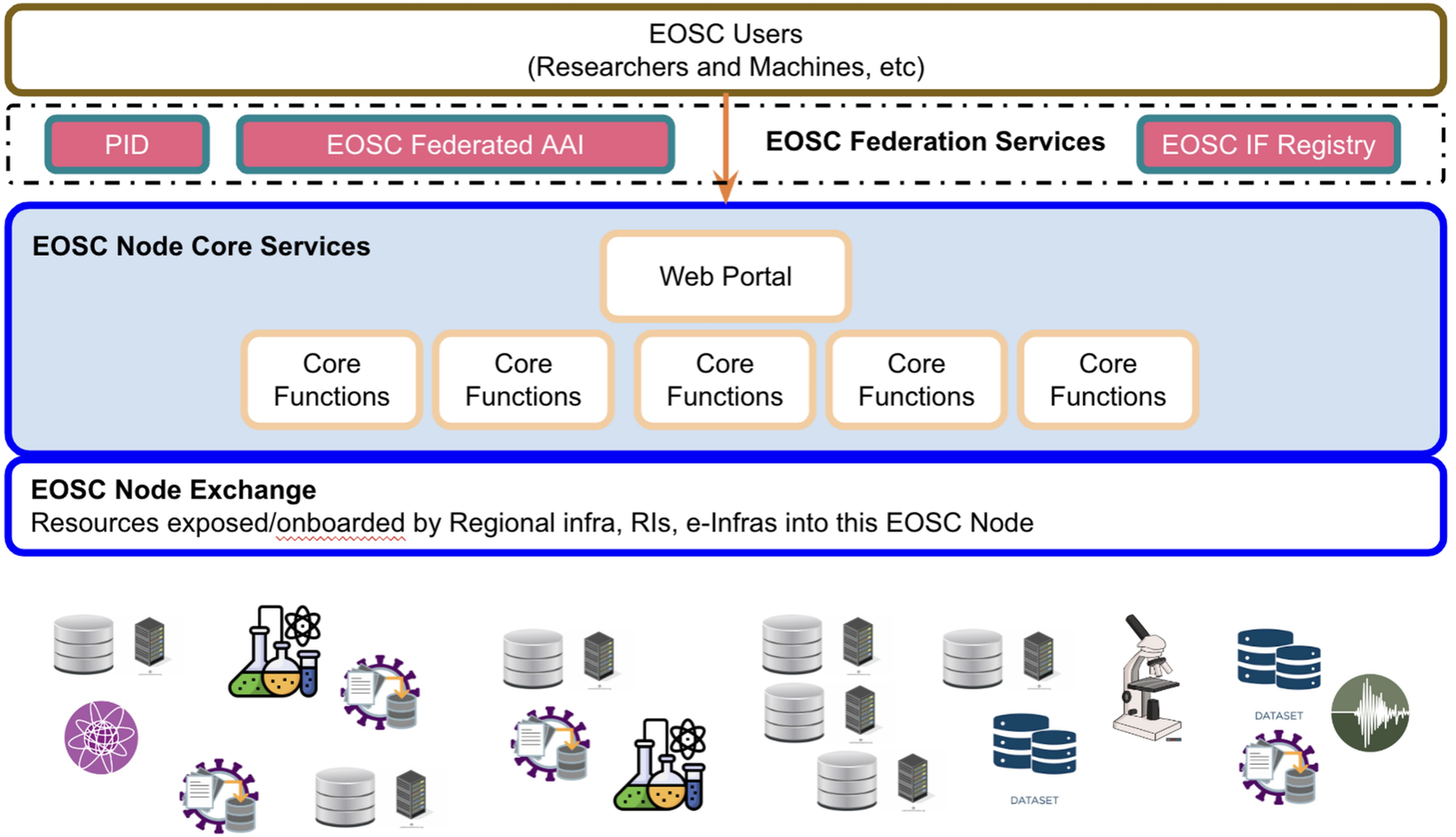
Simplifying the Core, Recognizing the Complexity of the Exchange

EOSC Future's achievement was significant – but the reality is that THAT implementation is not the only one possible

- E.g. SIMPL will supposedly solve all of these problems with different technologies, different code.
- Existing research communities have also fulfilled many of these requirements with their own solutions.
- EOSC Procurement may not adopt what has been created by EOSC Future.

We also have to recognize the diversity and complexity of all the resources coming from different communities.

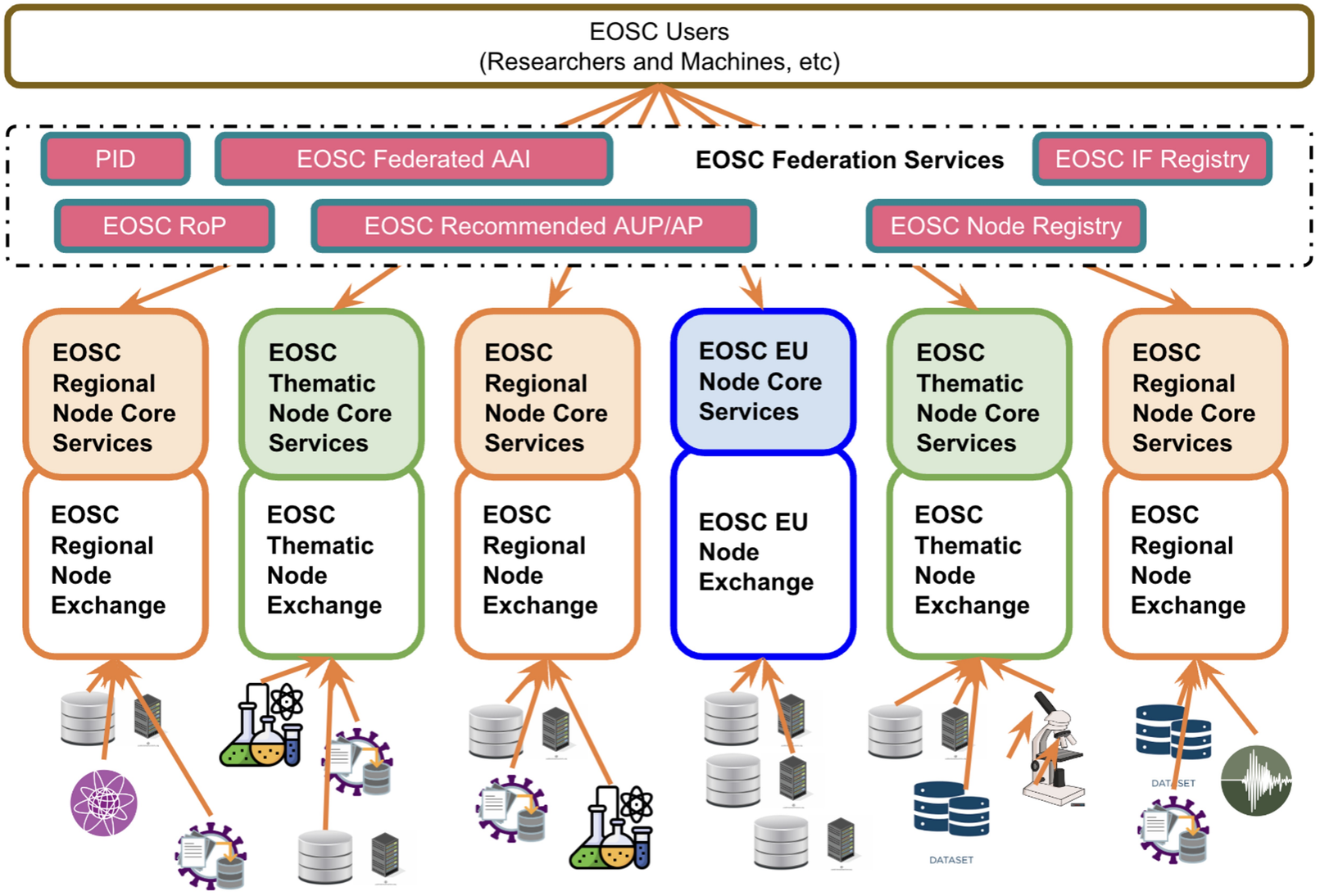
- Ensuring their interoperability is KEY!



How will many Nodes work together?

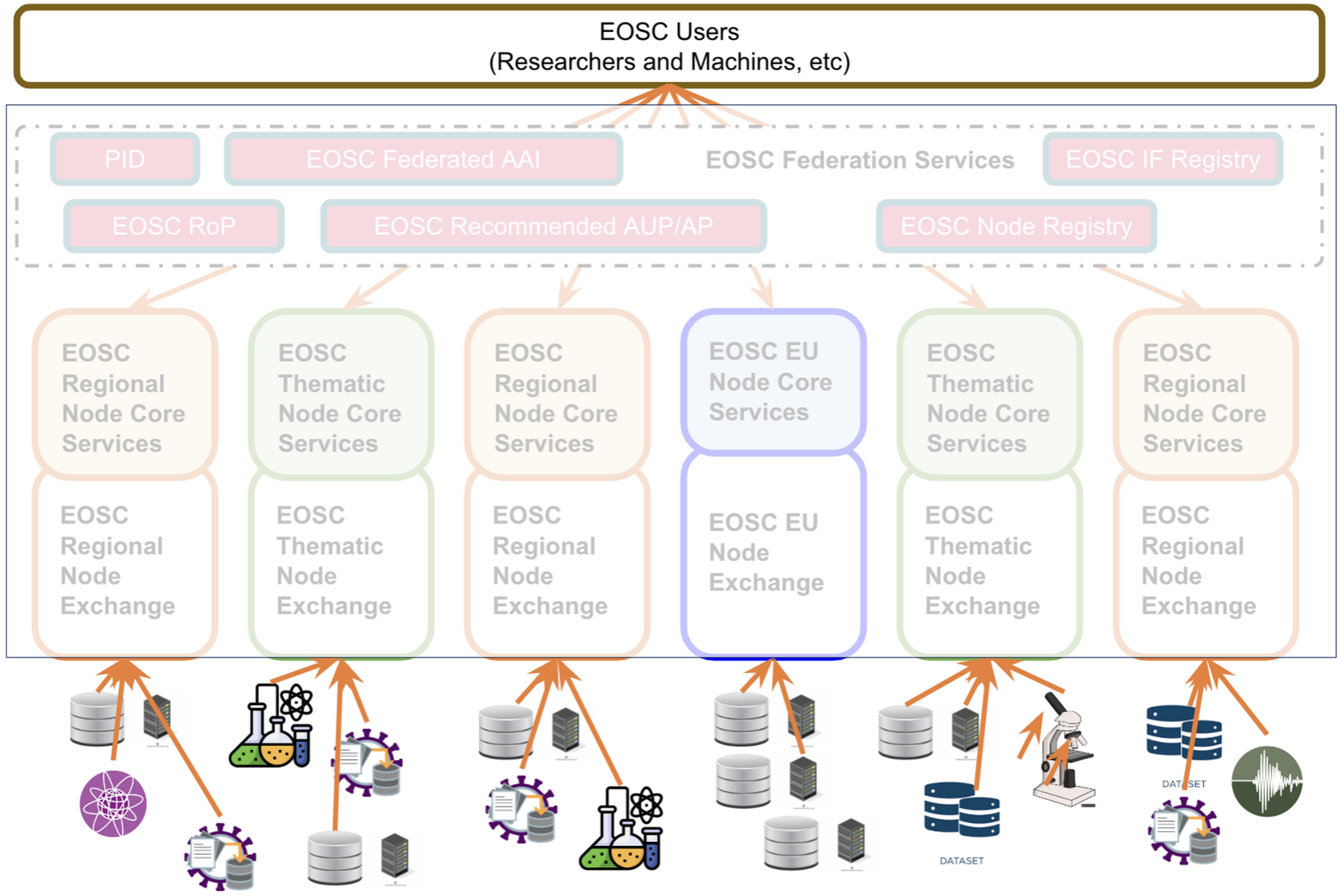
The key question of “Federation”

1. A Node-based architecture recognizes that the different communities ARE different.
2. Different resources are available in each Node. Explicit steps must be taken to expose resources from Node A to Nodes B, C, D etc.
3. Additional Federation Services will be needed (outside any one Node), to navigate the full landscape.
   a. e.g. Registry of EOSC Nodes
4. Additional governance instruments (RoP, AUP, AP) will also be needed, as well as recommendations/best practises that facilitate interoperability.



What do we really want?

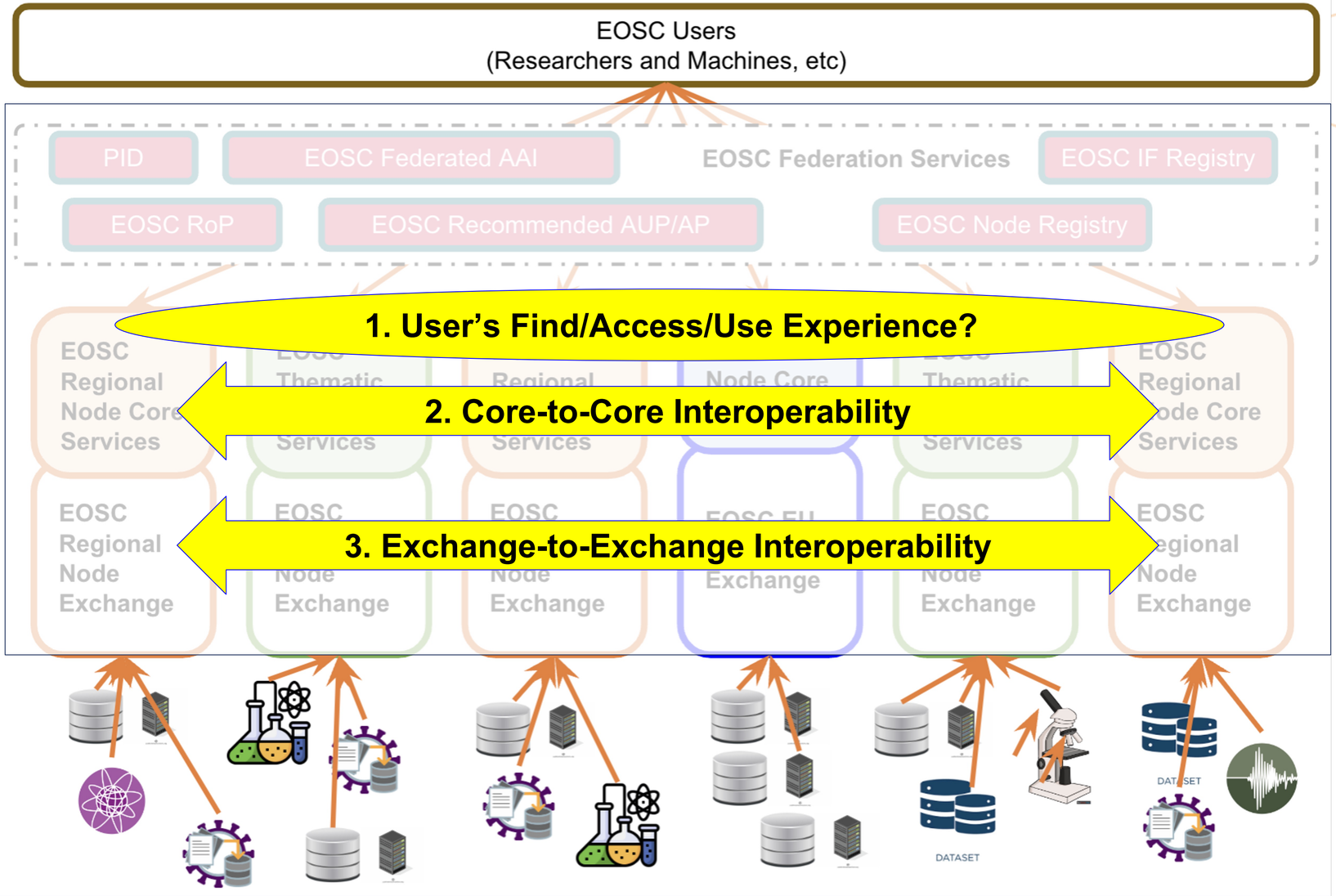
Users finding and using resources....



How do we make this happen?

How do we achieve interoperability?

1. User Experience: Will the user experience of EOSC feel like a mall with many shops, or some kind of online e-commerce site for research, where all resources are exposed together in one interface?
2. If each Node uses different technology to implement its Core services, how will they work together?
3. If we want resources onboarded to different EOSC Nodes (through their respective EOSC Exchanges) to work together, how do we achieve this?



Summary

- EOSC Future advanced the concept of EOSC by delivering the first implementation of the Minimum Viable EOSC
- The components of EOSC Future represent key capabilities for EOSC Federation Services, as well as an EOSC Platform that can power multiple EOSC Nodes, including the EOSC EU Node.
- New Federation Services will be need to realize the vision of an EOSC with multiple interoperable Nodes
- New EOSC Core Services will be needed
  - To provide a seamless user experience for finding/accessing and using resources from across the EOSC Federation
  - To allow different implementations of the EOSC Core, as deployed in different Nodes, to work together effectively,
  - To allow resources from different EOSC Nodes to be integrated into useful research workflows.

Contact us

Get in touch with us

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