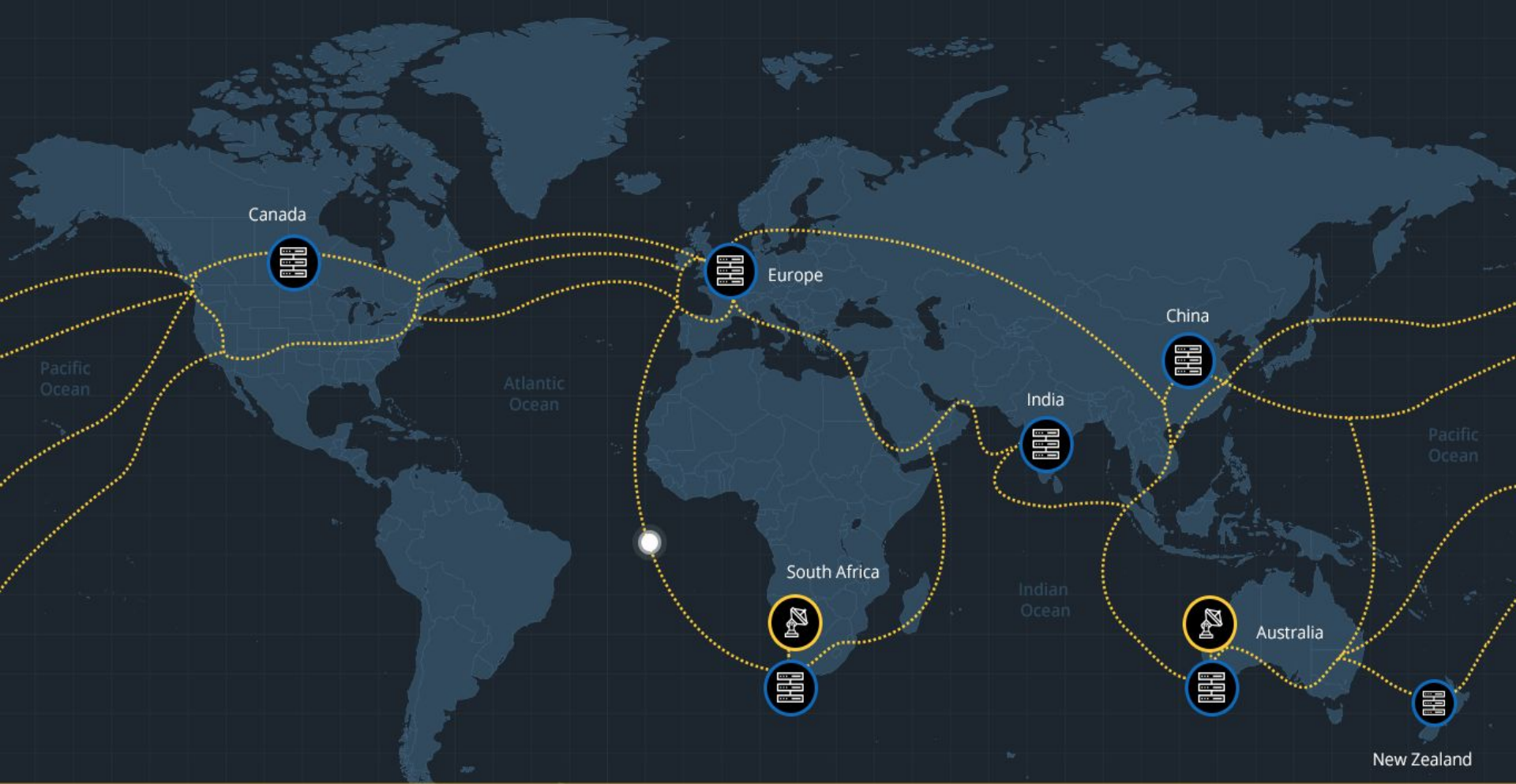




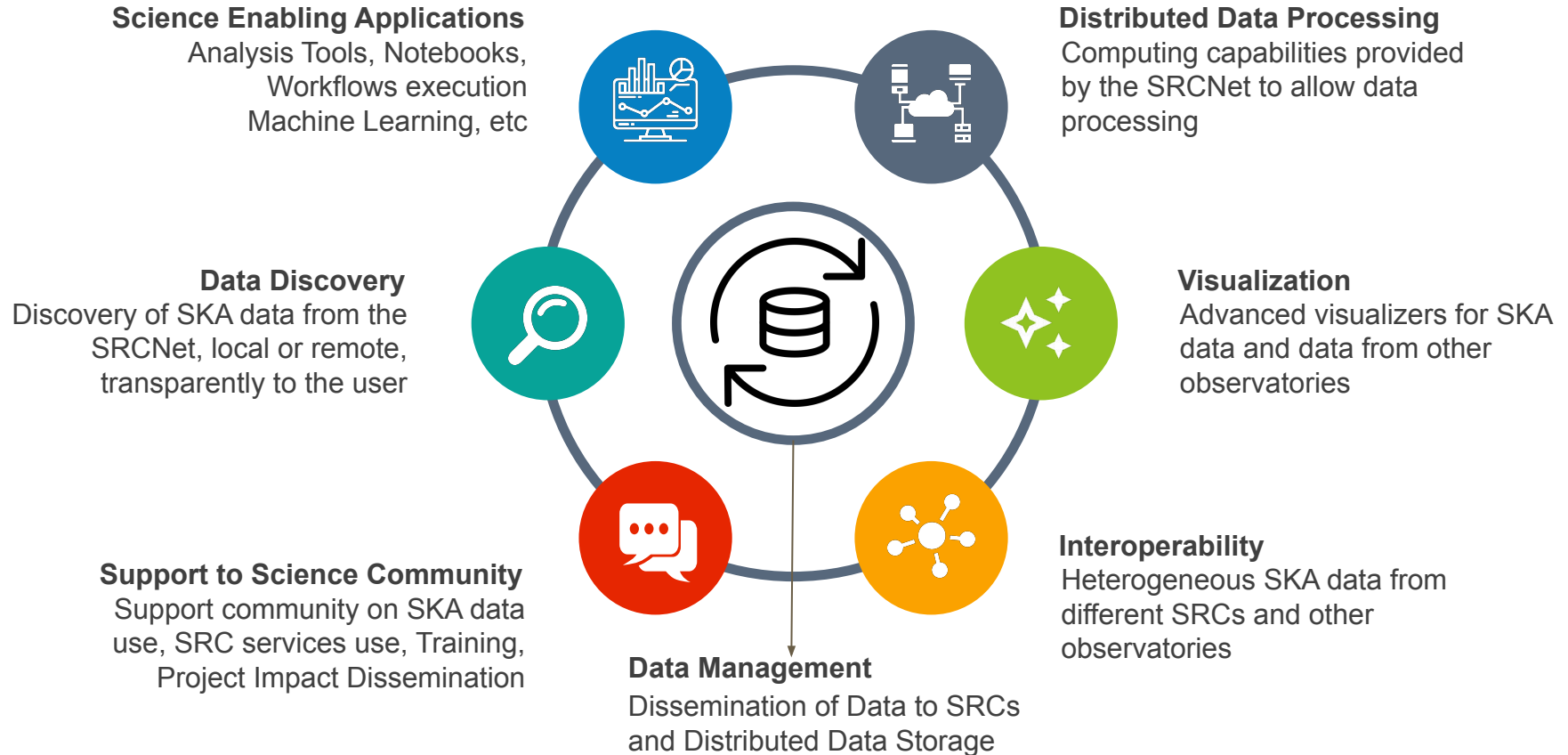
The SKA Regional Centre science analysis platform vision

— Yan Grange —
on behalf of “team Tangerine”



SKA Regional Centres (SRCs)

SKA Regional Centre Capabilities Blueprint



SRC Network global capabilities



Every node is an instance of the blueprint

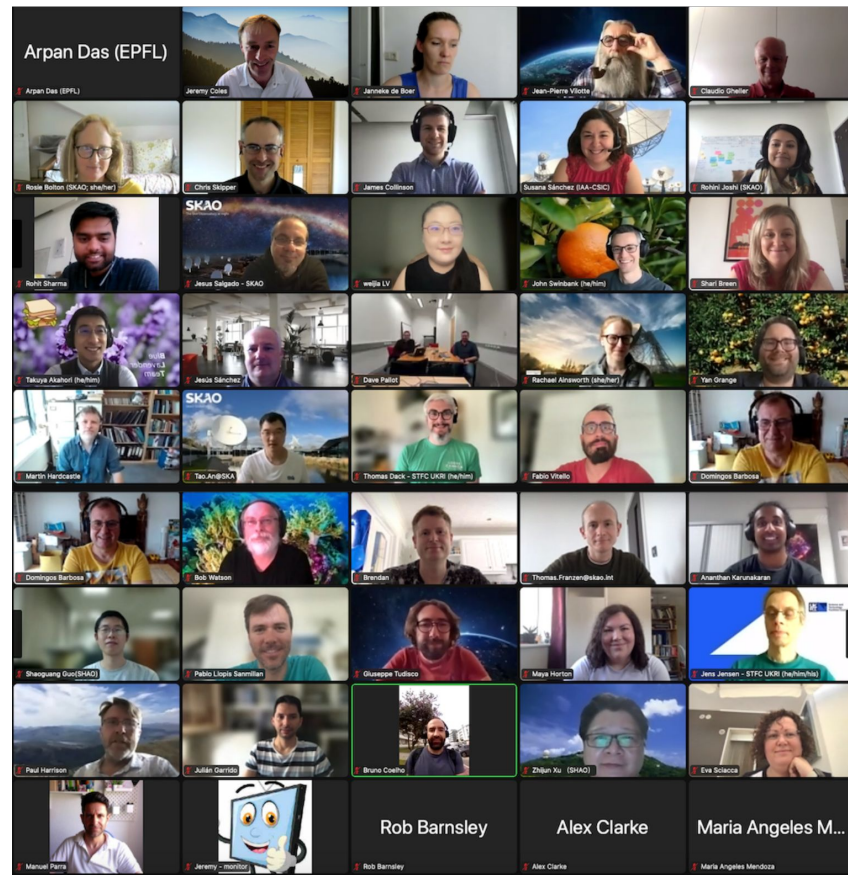
Interconnections are done using agreed APIs, using FAIR and VO protocols where available

Collectively meet the needs of the global community of SKA users

Anticipate heterogeneous SRCs, with different strengths

SKA SRCNet prototyping

- 🍊 Start of the Prototyping phase with a team of teams (50 developers, 20 observers) on the SRC ART
- 🍊 Program Team: Rosie Bolton, Jeremy Coles, Jesus Salgado
- 🍊 Science user engagement WG driving an improved understanding of the use cases



Shout out to Jesus Salgado who will present more on the prototyping in the Radio IG session (session 16; oct 20 20:30 UTC)

Draft notice

The platform vision is currently being reviewed by several people within the the SKA SRC network development team. So the document currently is at a draft stage.

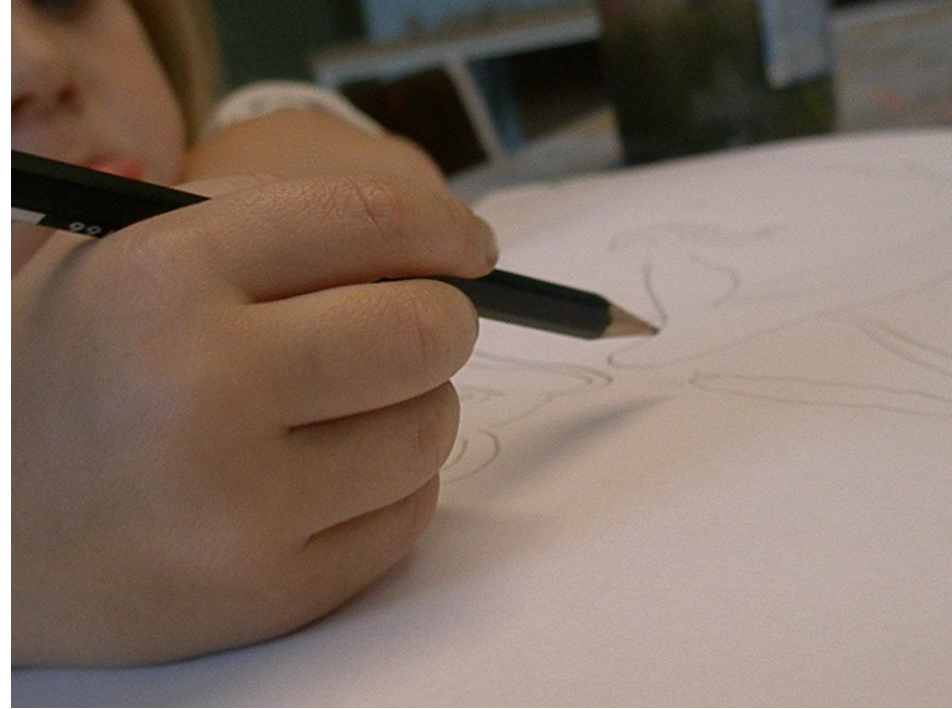
Design considerations

Attributes:

- 🍊 consistency
- 🍊 scalability
- 🍊 reproducibility
- 🍊 usability
- 🍊 reliability

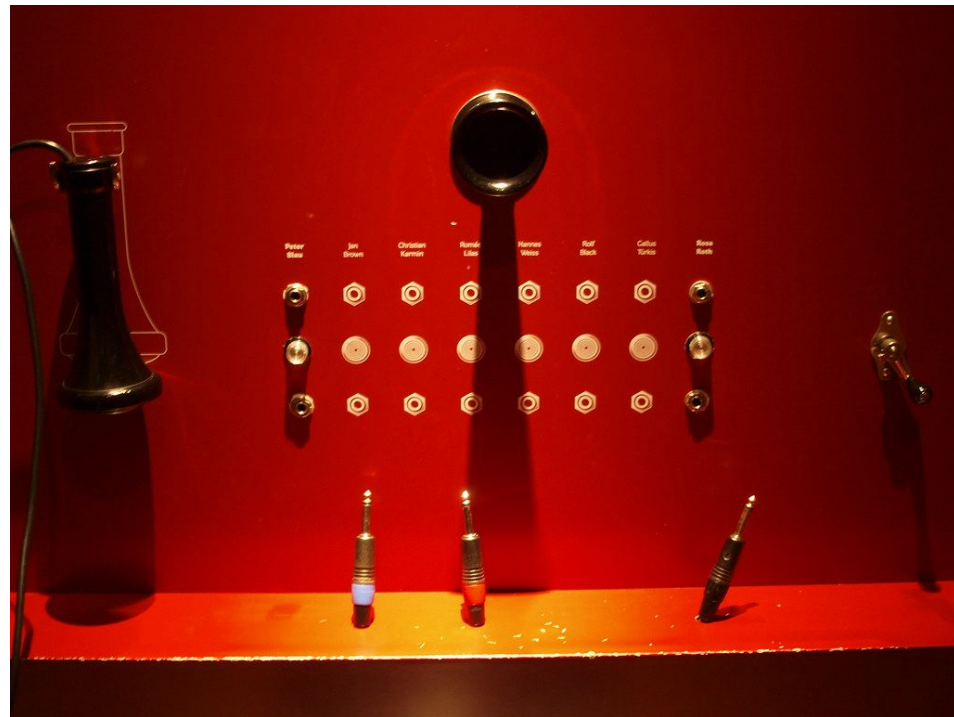
Guiding principles:

- 🍊 Highly collaborative
- 🍊 end-to-end
- 🍊 accessible (with focus on inclusion)



Backend services

- 🍊 Compute services
- 🍊 Archive and distributed data
- 🍊 User file and database services
- 🍊 Authentication and authorization



Frontend

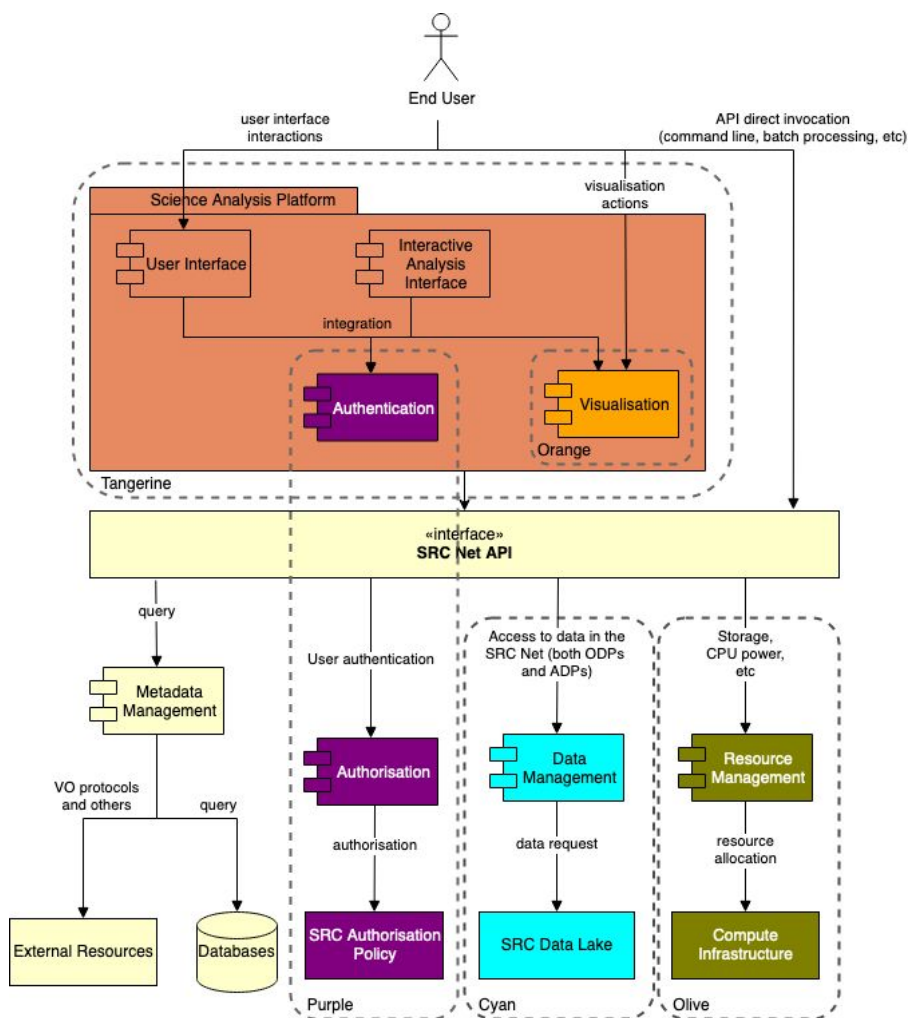
- 🍊 Main user interface
- 🍊 Data querying and discovery
- 🍊 Notebook interface
- 🍊 Software environments
- 🍊 Web APIs
- 🍊 Workflow management
- 🍊 Resource management
- 🍊 Groups
- 🍊 Software repository



The platform in the SRCNet



The platform brings together all components of the SRC network for the users



VO standards in our vision

- 🍊 SKA will mostly produce Science-ready Data products.
 - SIAP, SSAP, TAP, ADQL
- 🍊 Work in the prototyping ongoing about integration between the data management system and the VO protocols
- 🍊 Beyond the “vision” part, usage of UWS (see talk Klaas Kliffen ~8 hrs ago) for batch processing is to be considered
- 🍊 Complexity may lie in processing data that is stored remotely (e.g. remote cutouts via SODA)