DGI Activities
Now and in the Future

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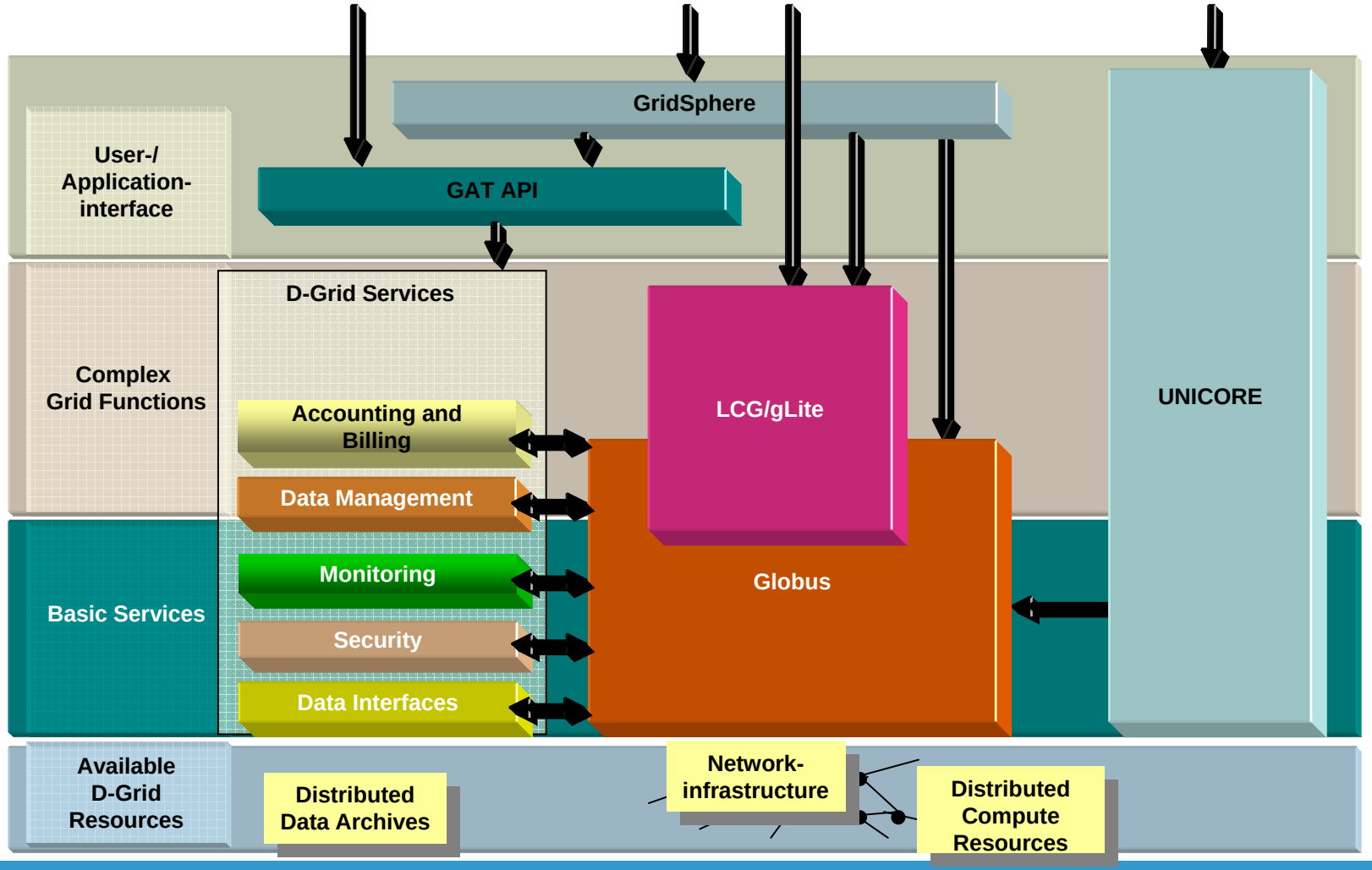
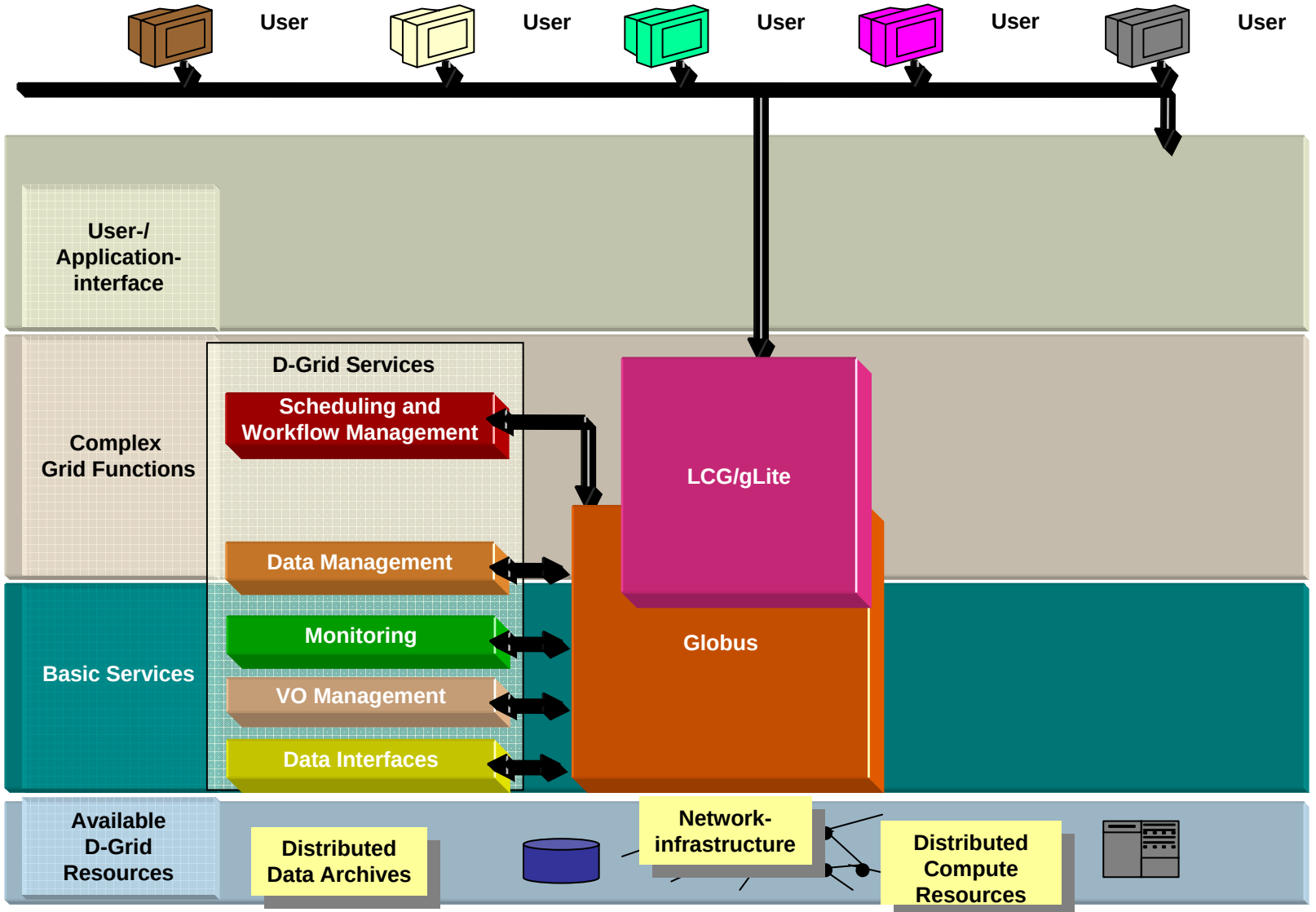
Middleware Coordination in the D-Grid Integrationproject

DGI Structure



HEP-Community Grid



Tasks of DGI Projects

- Community Support
  - Training
  - Information on new versions
  - General support
  - Cooperation on special requests
- Services for the communities
  - Installation packages
  - Documentation
- Extension of existing software systems
  - New software components to fill (small) gaps
  - Adaptation of new middleware versions

HEP-CG Support in the First Year

- Installation of dCache gLite-SE server and tape simulator as a test environment
- Support of community tutorials
- Adaptation of gLite to an SGE batch system with AFS at RZG
- Adaptation and installation of P-Grade and GridSphere portals for monitoring and job submission
- Development of GridPortlets for gLite
- SRM/dCache:
  - Improvement of installation process
  - Test of new version together with VOMS
  - Installation at FZ Jülich: productive use by VO ILDG, support of VO DGTEST, visible in LCG-monitoring
- Experiments with VO and VOMRS

Community Feedback

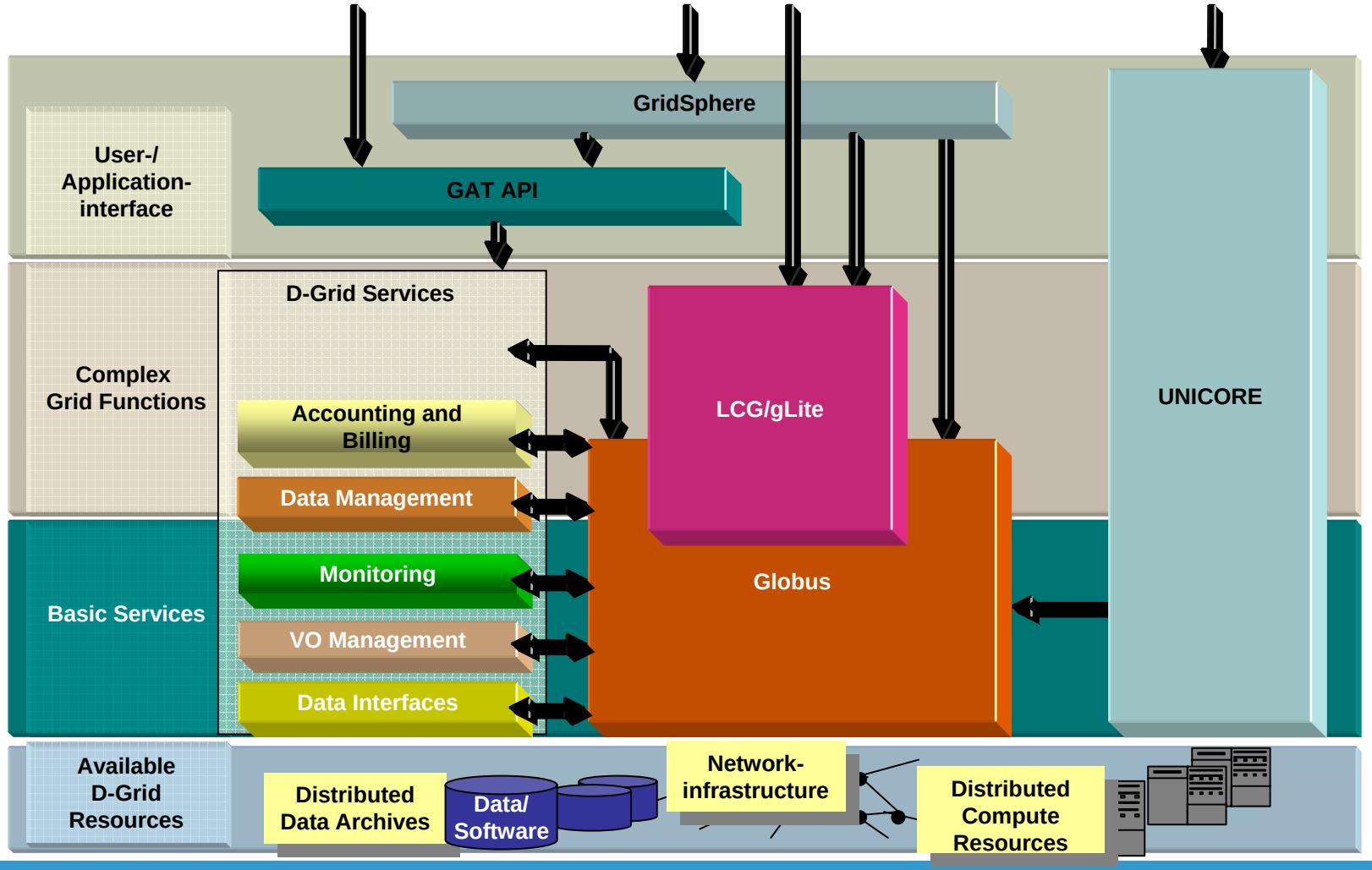
- Training workshops and tutorials
  - Usefulness of offered events?
  - Topics of additional workshops?
- Response time and quality of requests for general support?
- Ideas for new special request projects?
- Quality and availability of installation packages and documentation?
- Gap filling of existing software systems
  - Relevance of identified and addressed gaps?
  - Any other important gaps?

- New strategy: DGI project members present their approaches at community meetings.

Development Integration

- Software development of HEP-CG
  - Scalable storage element
  - Workload management
  - Metadata catalogue
  - Job execution monitoring
  - Web-portal for job monitoring
    - Any cooperation with GridSphere?
  - Interactive job steering
  - Distributed data analysis
- Integration of those components into the D-Grid Structure?
  - Which components and when?
  - Which additional support is required for integration?
  - Who will provide long term support?

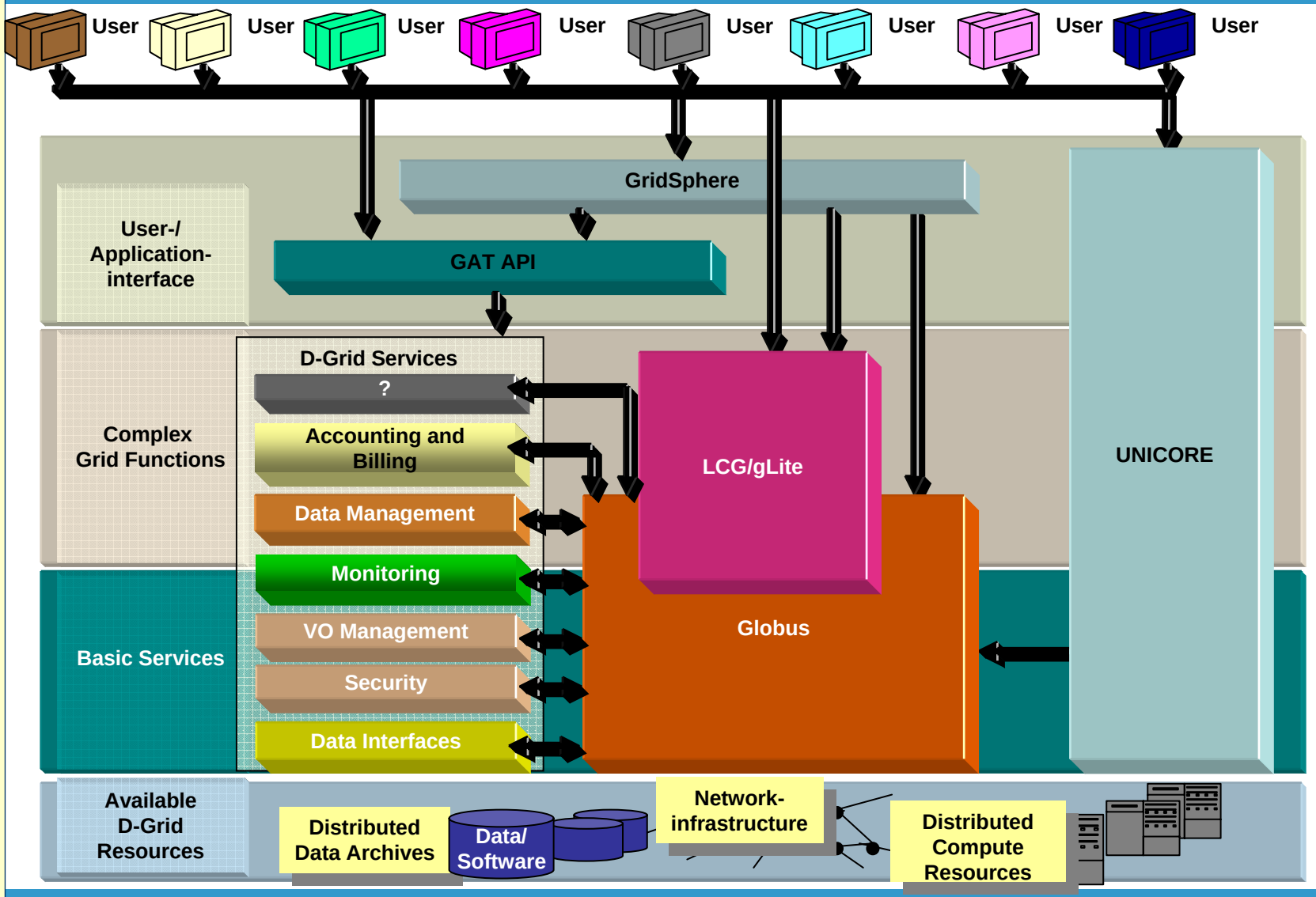
New Grid Resources



BMBF Infrastructure Funds

- More than 1000 CPUs with more than 2000 Cores plus a significant amount of storage resources
- Conditions
  - Support of all 3 middlewares (gLite, GT4, UNICORE)
  - Storage resources can be accessed by either SRM/dCache, SRB or OGSA/DAI.
  - All (compute) resources are accessible by the whole D-Grid community with highest priority.
- DGI defines and provides a reference installation
  - Installation packages
  - Documentation
  - Configuration (Howto)
- Resource integration across communities
  - Advantageous or detrimental?

D-Grid 2 Call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GAT API
D-Grid Services
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Accounting and
Billing
Data Management
Monitoring
VO Management
Security
Data Interfaces
Complex
Grid Functions
Basic Services
LCG/gLite
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UNICORE
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Data Archives
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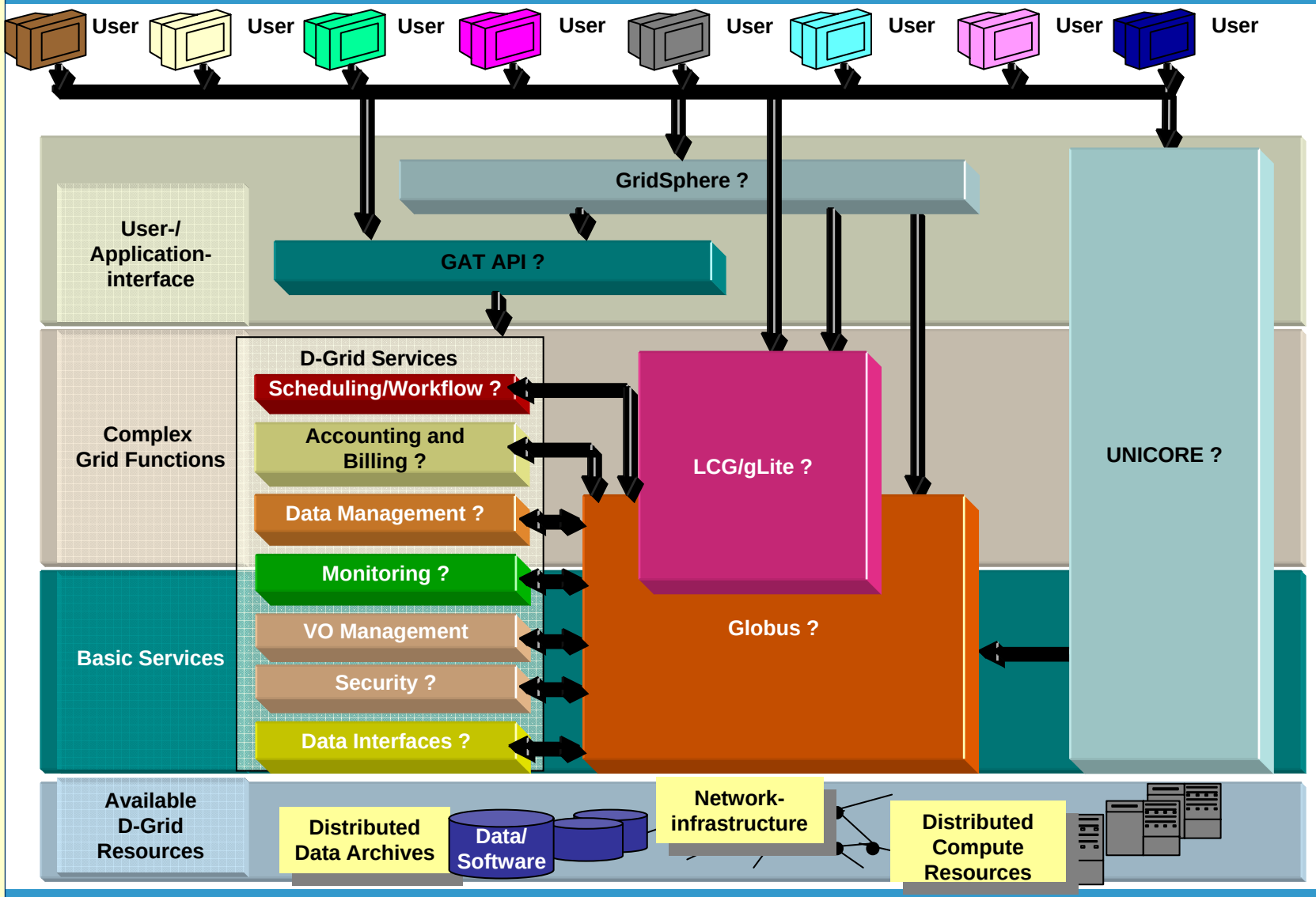
New D-Grid Projects

- Gap projects of D-Grid
  - Integration of VOMS and Shibboleth (IVOM)
    - A step towards a common infrastructure
  - Additional gap projects have passed the first round.
- Horizontal service Grids
  - Services that are beneficial to several communities
- New community Grids
  - Involvement of industry is required
  - Relation to science oriented Grids?
- How are existing communities involved?

DGI 2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Continuation of the DGI Project

- Not all existing projects will continue.
  - Evaluation is based on community feedback.
    - Which existing projects are important for you?
    - Is any change of focus required?
- Some new projects will be included.
  - Example: Higher level Grid functions
  - Selection is based on community requests?
    - Which new services are required?
    - Expertise within the community?
      - Can sustainability be guaranteed?

Conclusion

- Cooperation with the DGI can be improved.
  - Partial success for neighboring projects.
  - General feedback is missing!
  - New methods are required!
- Cooperation with other communities
  - More support for own software tools
  - No waste on duplicate software development efforts
- D-Grid infrastructure
  - Additional resources
  - Better methods to share resources
  - Incentive for other groups to add resources
- DGI 2
  - Opportunity to shape the project