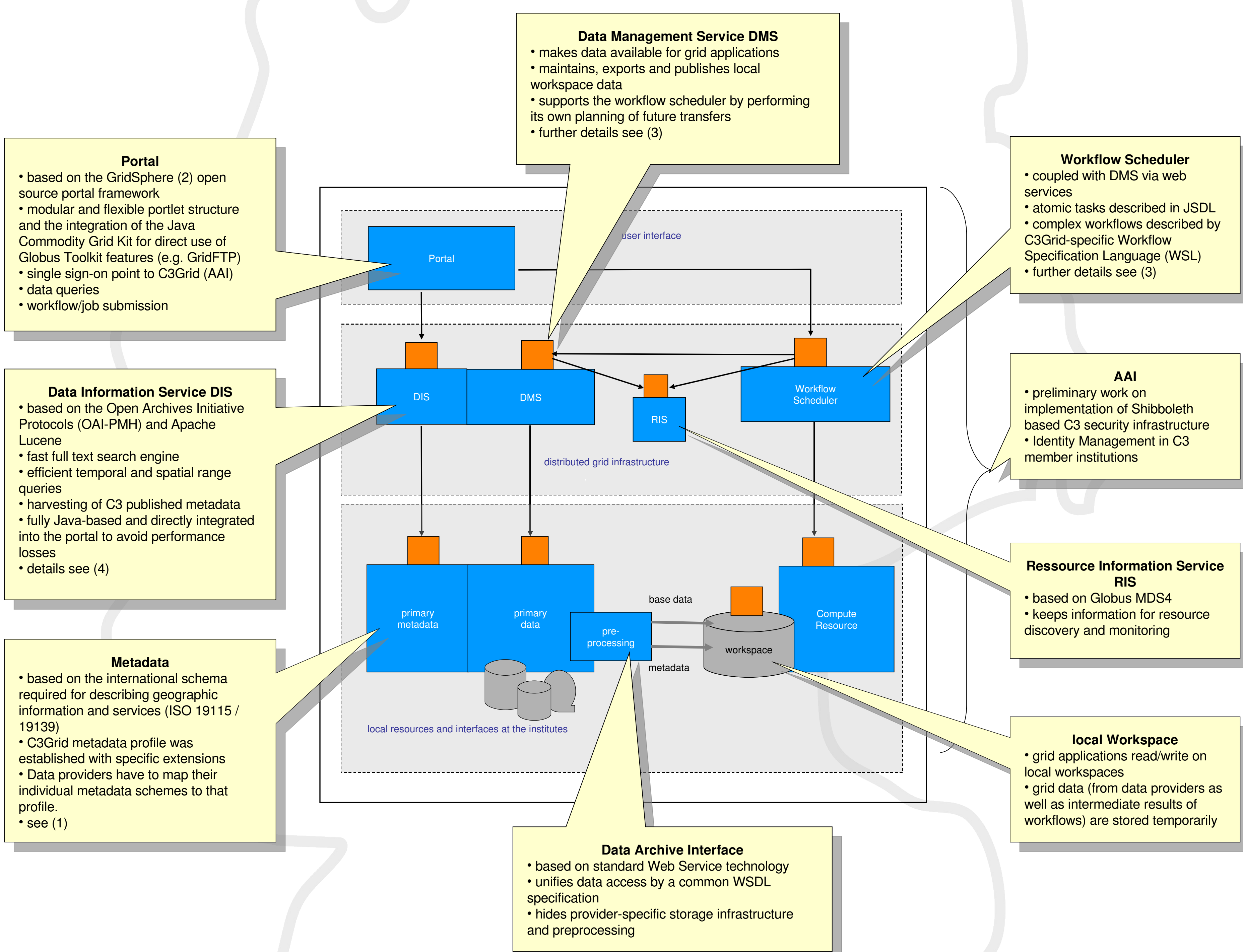
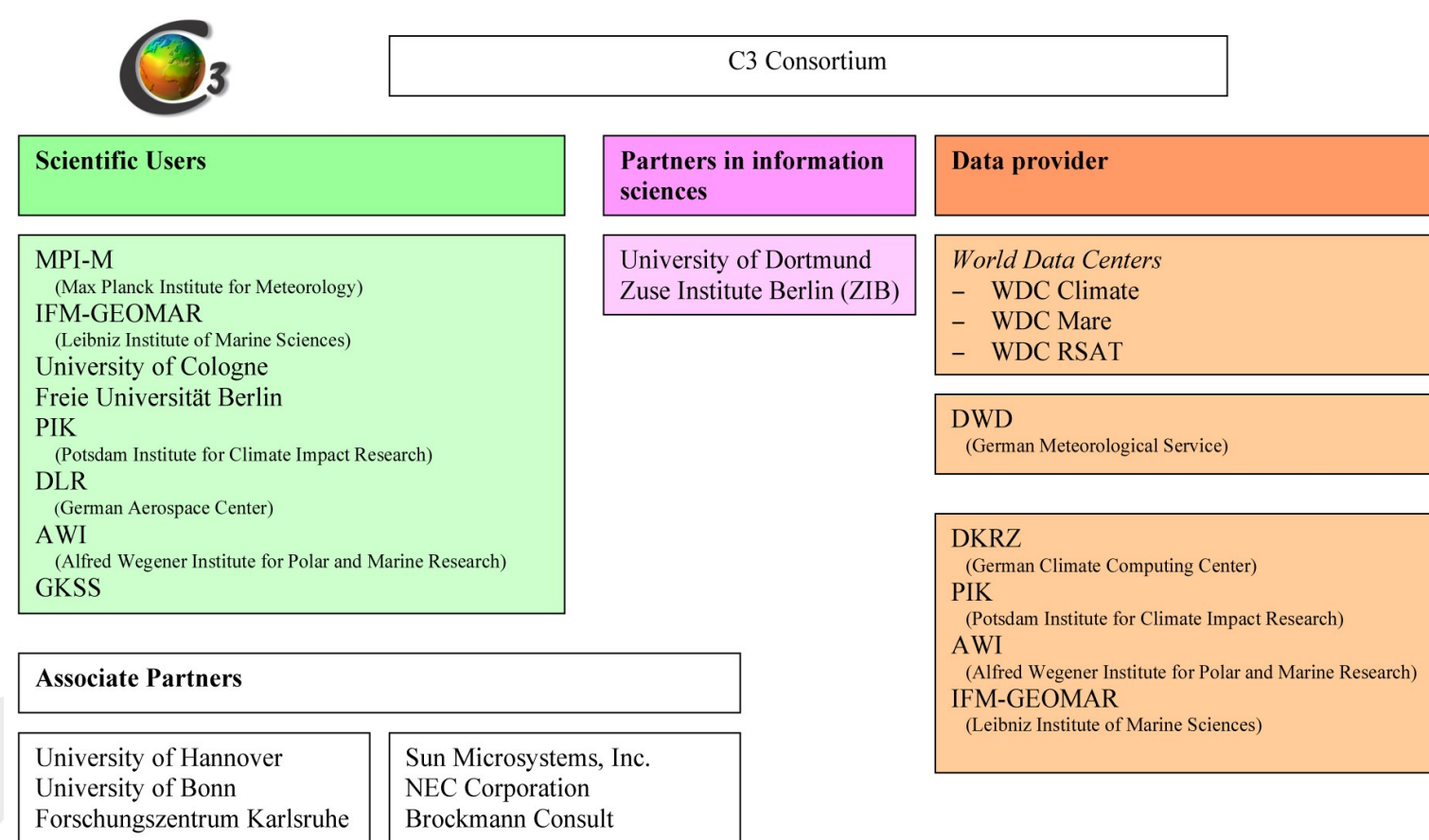


The "Collaborative Climate Community Data and Processing Grid – C3Grid", funded by the German Ministry for Research and Education (BMBF), is setting up a grid infrastructure for a seamless and fast access to the numerous data resources in the community of earth system research. C3Grid will ease model setup as well as data comparison and gives a broad scientific community access to model results and observational data.

The world data centres WDC Climate, WDC RSAT and WDC Mare as well as Germany's National Meteorological Service (DWD) and several other scientific institutes with specialised datasets provide a variety of data resources. Scientists from all major German earth science institutions are in the consortium and take part in the development and implementation of the C3Grid. They are supported by specialists from applied computer science from ZIB and University Dortmund.

- General:**
- basic middleware Globus Toolkit 4.x with some C3 specific components
  - components coupled via Web Services
  - C3 data publications standards
  - workspace for logical/physical namespace mapping
  - workflows consisting of several sequential but mutual dependent chains of elementary tasks → WSL



**Status:**

- Generation 0 implementation of C3Grid with high attention in development of infrastructure for data discovery and retrieval
- Gridification of two typical diagnosis workflows (stormtrack and humidity flux analysis)
- Generation 1 (release in September 2007) with data from all data providers and enhanced workflow scheduling

**Further steps:**

- integration of further data provider
- user support for gridification of new workflows by prototypic implementation of a Workflow Information Service (WFIS)

References:

1. S. Kindermann, M. Stockhause, and K. Ronneberger: "Intelligent Data Networking for the Earth System Science Community" GES 2007
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4. U. Schindler, B. Bräuer and M. Diepenbroek: "Data Information Service based on Open Archives Initiative Protocols and Apache Lucene", GES 2007

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