

Welcome to VAMDC EU Project

VAMDC aims at building an interoperable e-Infrastructure for the exchange of atomic and molecular data. VAMDC is a complex project involving 15 administrative partners representing 24 teams from 6 European Union member states, Serbia, the Russian Federation and Venezuela. It embraces on the one hand scientists from a wide spectrum of disciplines in atomic and molecular (AM) Physics with a strong coupling to the users of their AM data (astrochemistry, atmospheric physics, plasmas) and on the other hand scientists and engineers from the ICT community used to deal with deploying interoperable e-infrastructure.

VAMDC is supported by EU in the framework of the FP7 "Research Infrastructures - INFRA-2008-1.2.2 - Scientific Data Infrastructures" initiative. It started on the 1st of July for a duration of 42 months.

The project has several dimensions:

- **Networking Activities** (WP2, WP3) will coordinate the infrastructure activities among all trans-disciplinary fields) both within the ERA and externally through direct partnerships with the Russian Federation, Serbia and Venezuela. The NAs will link VAMDC to other international projects relevant to VAMDC (e.g. Astrogrid, ITER and Europlanet) thus creating a world-wide e-science environment for atomic and molecular data. NA1 will interact with other data providers and ICT teams from both EU and non-EU countries in order to ensure the most comprehensive and inclusive development of the infrastructure. NA2 will disseminate VAMDC services and facilities by engaging and obtaining feedback from anticipated users such as the astrophysics, atmospheric, fusion, ICT communities. The NAs will also have a political role defining the policies of the infrastructure.

- **Service Activities (SAs)** (WP4, WP5) will create a unique, state of the art e-infrastructure, the **Virtual Atomic and Molecular Data Centre (VAMDC)** for both A&M data producers and users through the availability of major databases in an interoperable format, the maintenance of services allowing publications of small datasets by producer's teams, the maintenance of registries and dictionaries, the maintenance of nodes listing the needs for the various communities (in relation with other EU initiatives) and the creation of a GRID environment for codes and databases.

- **Joint Research Activities (JRAs)** (WP6, WP7, WP8) will build the complete set of "tools" necessary to create the VAMDC e-science platform, creating new specifications and creating/adapting/integrating new software.

