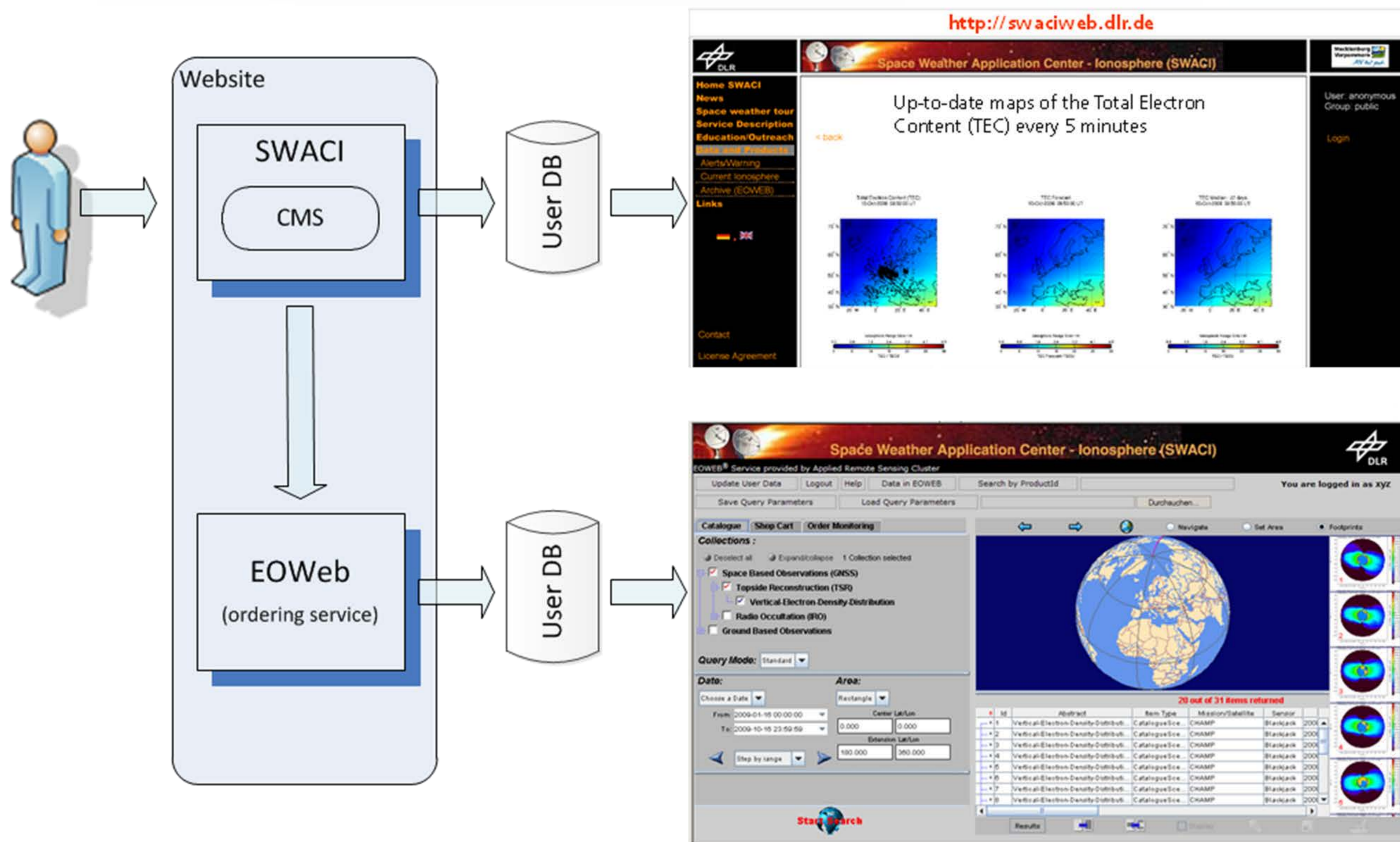


Analysis and Design of a Portal for Ionospheric Data

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What we did yesterday...



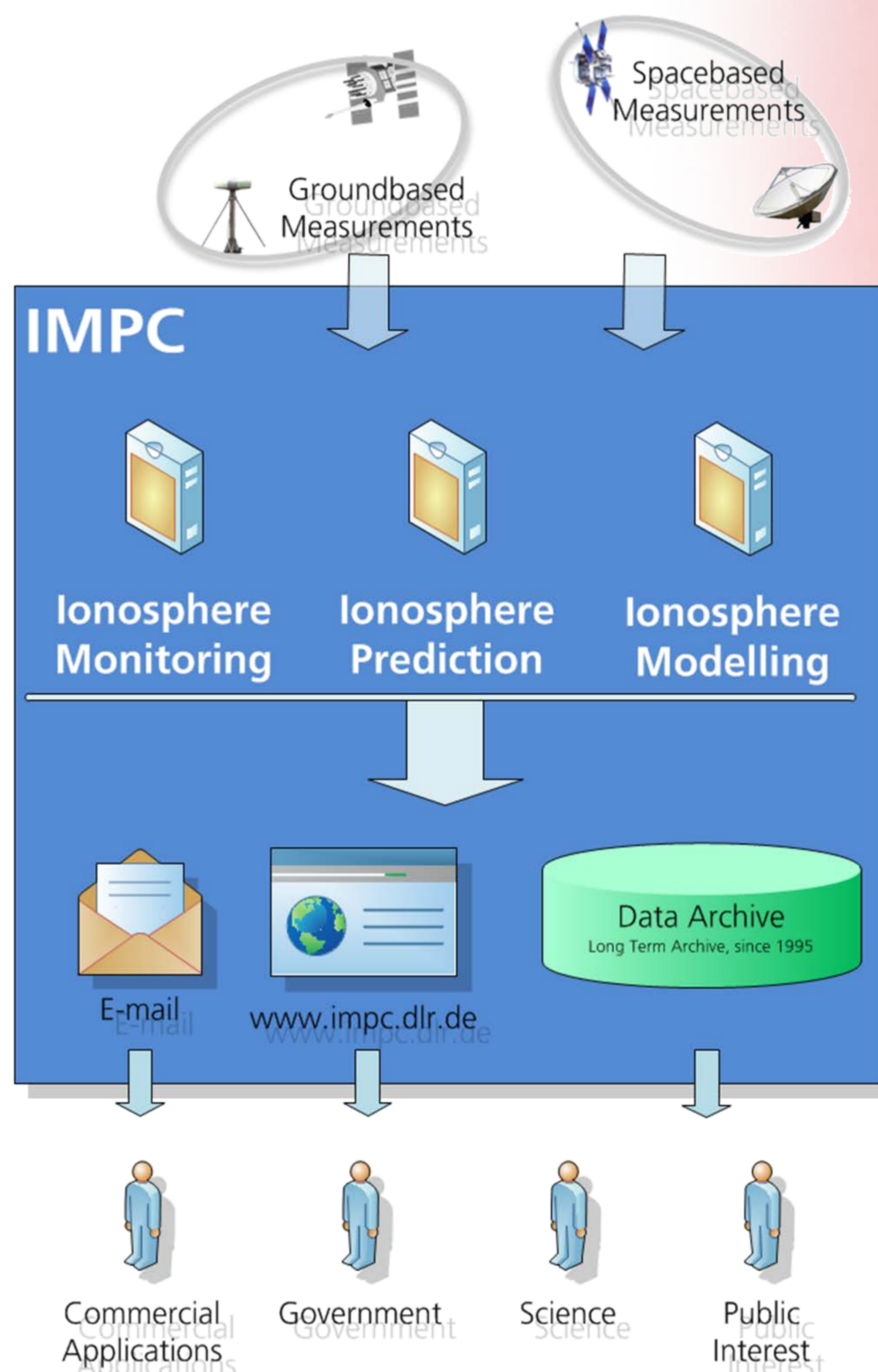
About SWACI

In 2004 DLR Neustrelitz started to develop and operate the Space Weather Application Center – Ionosphere (SWACI). This center was involved in several projects of the Space Situational Awareness (SSA) program of ESA and of EU FP7. It is largely based on services and tools of DLR's Data and Information Management System (DIMS) and its long-standing User interface EoWEB. SWACI provides access to near real time products and ensures long-term preservation. After more than 10 years, both the design and the architecture of the center has to be fundamentally modernized. Disadvantages were e.g. the use of legacy technologies in the ordering system EOWeb and maintenance of keeping two separated user directories in sync.

...and what we are going to do for tomorrow!

About IMPC

Ionospheric Monitoring and Prediction Center (IMPC) will offer a variety of near-real-time information about the current state of the ionosphere (nowcast / monitoring), access to a longterm archive (e.g. TEC EU since 1995) as well as forecasts and warnings. From its predecessor SWACI it takes benefit of experience in establishing and operation of pilot services and a long term data archive. SWACI has been continuously extended and improved and is now being transformed to the IMPC.



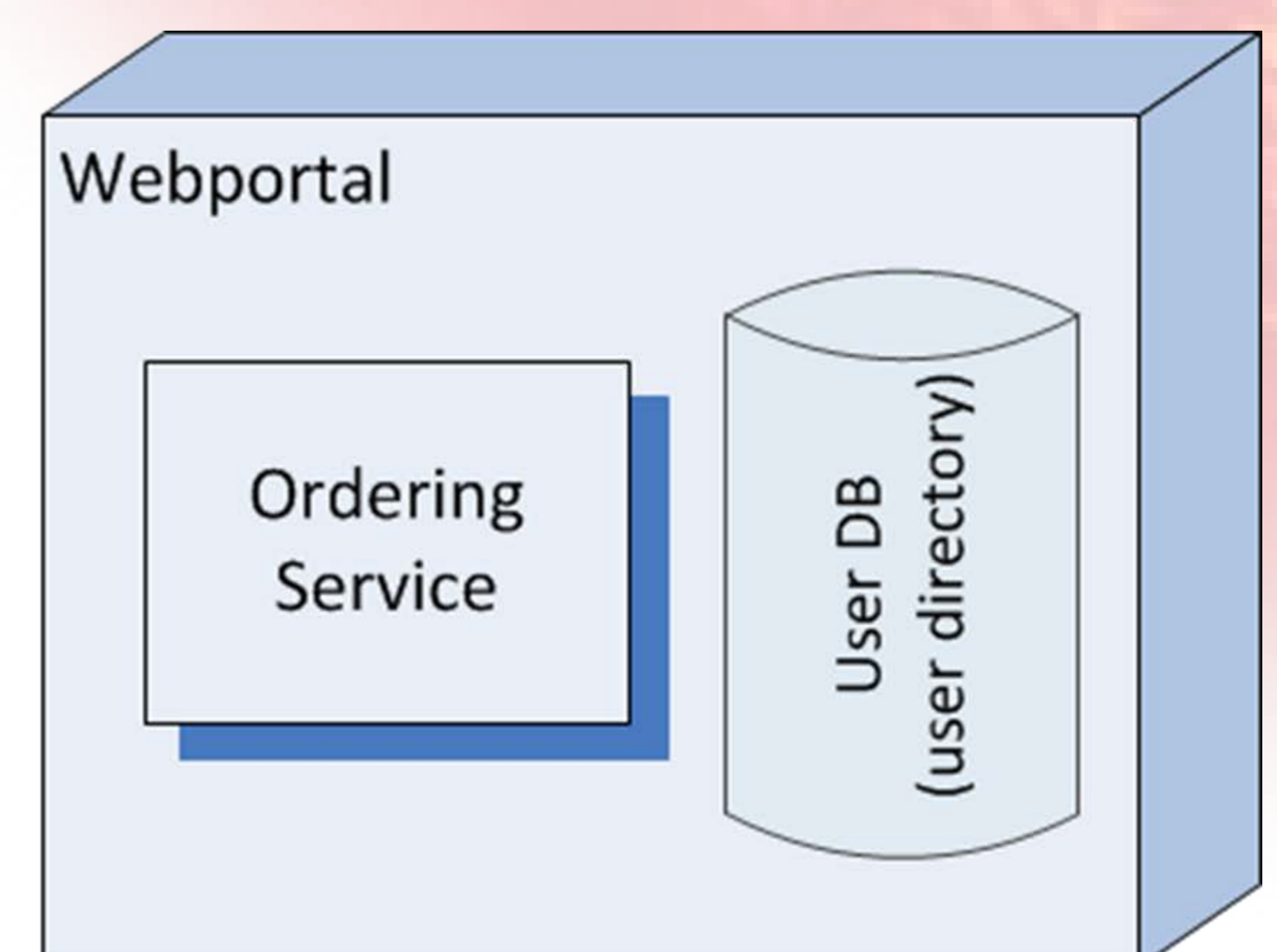
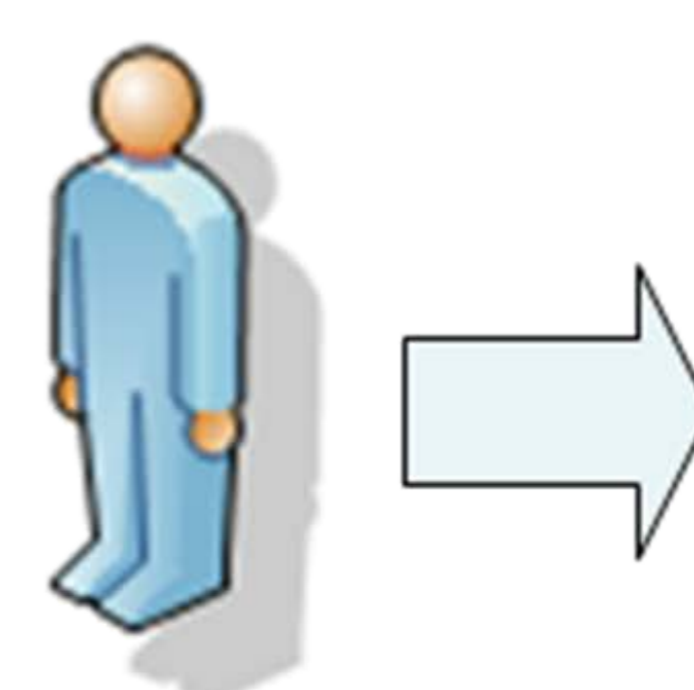
IMPC will continue with the services but overcome the above mentioned disadvantages.

The IMPC will cover significant tasks like monitoring of critical ionospheric parameters, detection and assessment of ionospheric disturbances, modeling and prediction of relevant ionospheric parameters to forecasts ionospheric conditions as well as provision of information and alerts relevant for GNSS users. IMPC aims to become the Expert Service Center (ESC) for ionospheric weather in the frame of SSA.

Our goal

Our new web portal supports easy site and data access for developers, costumers and also for visitors by:

- fully responsive design
- barrier-free user experience
- global user management
- modern order system
- CMS-controlled environment
- high performance server



Picture reference: <http://spaceplace.nasa.gov/review/sun-age/sunround.en.png>

