The EU-funded CS3MESH4EOSC project is connecting locally- and institutionally-provided sync and share services and scaling them up to the European level and beyond. The project is delivering the Science Mesh, an interoperable platform to easily sync and share data, deploy applications and software components, while extending functionalities.

**Science Mesh to unlock scientific collaboration through technology**

Science Mesh will provide the aforementioned players with an interoperable platform with data, applications and computation combined, enabling them to easily synchronize, share and collaborate through applications and software components across Mesh-powered sites.

Jakub Moscicki, CS3MESH4EOSC coordinator and Deputy Group Leader for Storage at CERN, “Science Mesh allows the best of both worlds. Users do not need to leave the well-known winners of their institutional services to be able to efficiently collaborate with users in other institutions. Its unique functionalities may be easily extended to the needs of particular research disciplines. And it is leveraging a Multi-Open-Source development model in close collaboration with the Open Source industry, while imposing the Technology Readiness Level of contributing technologies (e.g. Open DataMesh).”

Science Mesh users will get the ability to share their data sets only according to PIR principles, without losing control over them. It will be an integral part of the European Open Science Cloud (EOSC), offering researchers opportunities to assemble, work on and transparently host their data. Bob Stier, Director of EOSC Association adds, “The project has the potential to deliver a collaborative cloud-based data sharing service for Europe, linking different communities and enabling cross-disciplinary research.”

Science Mesh is being developed in close contact with pilot research communities: Observations (LPC), High Energy Physics (LHC), Archaeology (LAPH) and Cultural Heritage Studies (PARADISEC). Future market opportunities for its commercial use are under study with global IT service companies (e.g. Aller! SoftwaresInc). Thefeedback from pilot users is connecting eight initial sites.