# Towards a Global Federated Framework For Open Science Cloud: Three Use Cases

Summary report, 20/07/2020

## e-Infrastructure & resources allocation

* CSTCloud has been successfully connected with EGI through the EGI AAI Check-in service.
* EGI AAI Check-In is now supporting the CAS IdP via eduGAIN.
* The CSTCloud openstack environment has been set up ready to be integrated into EGI federated cloud. And it shall be ready for federated services application later.
* Additional cloud resources procured by PSNC.
	+ A VPN account has been created for each partner to access the IaaS.

## Use cases

### Smart City

* The model simulation research led by Prof. WANG Lizhe had begun mitigating his application to CSTCloud. Their team has been assigned supercomputing resources from CSTCloud and it's under the testing phase.

### Precision Medicine

* The technical plan for migrating a GENOMICS database, led by Prof. ZHAO Wenming from the Beijing Institute of Genomics, CAS, to CSTCloud, is under discussion.

### Disaster Risk

* A forecast system for storm surges in Taiwan was generated with the OPENCoastS service platform.
* For ASGC on the WRF simulation of Typhoon Soudelor (2015), we have been working on the data verification for initial and boundary conditions.
* Next steps:
	+ Introducing better bathymetry
	+ Compare model results with data from Taiwan stations
	+ Force it with atmospheric predictions from WRF