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## **Cyberinfrastructure Vision for the 21<sup>st</sup> Century Discovery**

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Cyberinfrastructure is essential to the conduct of 21<sup>st</sup> century research and education. In a larger context, US and Europe view cyberinfrastructure as essential to the economic prosperity, security, and quality of life. Recent planning documents developed by the National Science Foundation (NSF) and 7<sup>th</sup> Framework Programme (FP7) provide similar approaches to invest in cyberinfrastructure for the 21<sup>st</sup> Century. NSF outlines in its strategic plan for cyberinfrastructure in a four part investment program. This plan was arrived at after several years of blue ribbon panels, internal discussions, and consultation with wide-range of community members. At the heart of this cyberinfrastructure vision is the development of a cultural community that supports peer-to-peer collaboration and new modes of education based upon broad and open access to leadership computing; data and information resources; online instruments and observatories; and visualization and collaboration services. In a similar thoughtful process, the FP7 produce a e-infrastructure plan that is intended to produce a new research environment in which researcher, independent of location, have shared access to unique or distributed facilities. This plan consists of six elements ranging for hardware augmentations to development of collaborative environments. The similarities and differences in approaches are presented.