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### **Abstract**

We have completed our contributions to the Fusion Simulation Program Definition Project. Our contributions were in the overall planning with concentration in the definition of the area of Software Integration and Support. We contributed to the planning of multiple meetings, and we contributed to multiple planning documents.

### **Final Report for Fusion Simulation Program Definition**

During the first year of performance on the Fusion Simulation Program Definition Project, there were accomplishments in

1. Developing the mission and vision for the Fusion Simulation Program
2. Preparation for September Program Advisory Committee meetings.
3. Discussion and analysis of management planning documents.
4. Participated in discussions that developed the relationship between legacy modeling codes and FSP.
5. Preparation and presentation of talk at the March Program Advisory Committee meetings.
6. Preparation and presentation of outreach seminar at U. Wisconsin.
7. Installed FSP Blog.
8. Developed management plan basics.

In addition there were the following frameworks specific tasks completed:

9. Analyze frameworks tasks into separate areas of high-performance computing composition, task composition (or workflow), development processes, and (from later enlargement) production computing.
10. Developed a wiki site for the frameworks effort.
11. Organized and set agenda for frameworks team conference calls.
12. Developed email list on stakeholders for the frameworks effort
13. Organized the 3-projects familiarization meeting at ORNL
14. Attended same meeting for 3 days. (Talk preparation charged to FACETS)
15. Organized conference calls and agenda for March FSP Planning Workshop.

16. WBS input for composition software suite completed through Q3, FY2010.
17. Slides for frameworks outreach completed and delivered to GA.
18. Prepared and presented talk at the March FSP Planning Workshop.
19. Oversight of March FSP Planning Workshop report.
20. Engaged proto-FSPs in discussion on transition to FSP.
21. Provided frameworks requirements.

During the second and final year of performance on the Fusion Simulation Program Definition Project, there were accomplishments in

22. Refining the mission and vision for the Fusion Simulation Program
23. Preparation for Program Advisory Committee meetings.
24. Discussion and analysis of management planning documents.
25. Discussion and analysis of committee reports.
26. Preparation and presentation of talk at the September and July Program Advisory Committee meetings.
27. Extensive development of the work breakdown structure.

In addition there were the following frameworks specific tasks completed:

28. Organized and set agenda for frameworks team conference calls.
29. WBS input for composition software suite completed through Q3, FY2010.
30. Prepared and presented talk at the March FSP Planning Workshop on frameworks and associated requirements.
31. Engaged proto-FSPs in discussion on transition to FSP.
32. Particular development of the frameworks part (Software Integration and Support) of the work breakdown structure.
33. Contribute to, collect parts from, and edit the final report section on Software Integration and Support, ultimately leading to the requirements for this task area of the FSP.