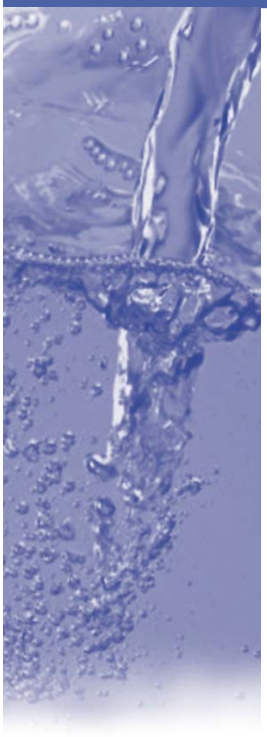

Initial Proposal for a new EGEE Member

Please take the time to fill this questionnaire in a fully as possible, and send it to Roberto.Barbera@ct.infn.it. Please save a copy of this file and add your responses in the boxes indicated, then save the file and send it to the email address above.

Your Name :	Doman Kim	**Date:**	October, 6th , 2005
Organisation :		**Your email address** ***(if different from the one used to send this file)*:**	
School of Biological Sciences and Technology, Chonnam National University, Gwang-Ju, 500-757, Korea		dmkim@chonnam.ac.kr	

Section A: Describe your community

1) Would you describe your community as 'Industrial' or 'Scientific'?
Scientific

2) Briefly, how do you feel that your community would benefit from gaining access to the EGEE grid infrastructure? What would you use the Grid's resources for, that could not be done at a local scale?
Currently we are working about carbohydrate related enzymes, glycosyltransferases, which have important functions in many biological organisms including human. One of our goals is focused on hunting the novel genes (and finally enzymes) with new genetic information through DNA and protein sequence analysis of various existing and new glycosyltransferases and furthermore inventing useful biomaterials using those enzymes in real world. For this purpose, informational resources related to glycosyltransferase genes are required to be harvested and analyzed by utilizing analyzing tools such as Blast, Swiss-Prot, etc…, yet currently the gene analyses need much more storages and faster analyzing abilities for computer. Thus, we are thinking that data GRID environment from EU is the best answer for these difficulties. Study outcomes make it produce the distinct phylogenetic tree of glycosyltransferase among biological organisms and confirm the relationship between enzyme characteristics and gene sequences. This can also give information about the functionality of glycosides in human proteins and/or enzymes. After isolating the unique characteristic genes of glycosyltransferase, they will be designed and evolved further for synthesis of valuable functional carbohydrates and proteins. Furthermore, study results will contribute on potential applications in the foods, cosmetics, and pharmaceuticals-medical industries, understanding on disease mechanisms and therapeutic pathways.

3) How many different countries does your community operate in?
More than 50 countries

4) Within your community, what is your best estimate of how many individuals would be using the Grid infrastructure over the next...	
...12 Months	*...24 Months*
50	More than 100

5) What is your best estimate of the number of sites from your community would be connecting to the Grid infrastructure over the next...	
...12 Months	*...24 Months*
10	More than 50

6) Does your community have particular Security requirements? If so, please briefly describe them.
No

7) Have any members of your community already attended any grid demos or tutorials?
Yes
8) If Yes to Q7, approximately how many people attended each event ?
Not sure
9) If Yes to Q7, how many events of each kind (demos, tutorials etc)?
<tutorial>

Section B: Describe your first application

10) Is your first application Industrial or Scientific? Please provide us with a brief description of the application's goals and algorithms
Scientific Goals 1. Analysis of glycosyltransferase genes and proteins through EU-data GRID environment and construction of phylogenetic tree based on o utput results. 2. Development of oligonucleotide probes for microarray to obtain ne w genetic information by comparing properties of glycosyltransferas es and novel genes. 3. Identification of new characteristic glycosyltransferase and Synthesis of useful functional biomaterials for foods, pharmaceuticals-medical applications. Algorithms Currently we are using Public Bioinformatics Programs for analyses and characterizations for genes and proteins

11) Is your first application
Data Intensive

12) Is your first application mainly intended for
Combined of interactive and batch

13) Quantitatively evaluate your application in terms of (first application)	
CPU power (SpecInt2000/SpecFp2000 per second per job)	
Memory consumption per job (Megabytes)	
Disk storage needs per job (Terabytes)	
Tape storage needs per job (Terabytes)	
Number of jobs per user per year	
Number of users per year	
Network bandwidth requirements (Megabit/sec).	

14) Quantitatively evaluate which percentage of the data of your first application needs to be replicated in more than one site and the average number of copies per elementary replicated data set (e.g., file).
It is necessary not to replicate our data, but to search for new information by compare/contrast previously known data sets

15) Does your first application have a graphic or a command-line user interface?
Command-line user interface

16) Can your first application be accessed and controlled using a web browser?
YES

17) Is your first application already interfaced to any grid middleware?
NO
18) If yes, to which middleware and in the context of which project?
<type your response here>
19) If yes to question 17, can you cite some references (fewer than 10) to related work?
<type your response here>

20) Does your first application need third party commercial software to run?
NO
21) If yes, which one(s)?
<type your response here>
22) Describe the license under which your first application can be distributed on the grid infrastructure.
<type your response here, max 200 words>
23) Describe concisely the security requirements of your first application.
<type your response here, max 500 words>

24) If you answered 'Yes' to questions 17 and 20, describe concisely (max 500 words) what problems you foresee to successfully port your first application on a distributed computing environment like the European Grid infrastructure.
<type your response here, max 500 words>

Section C: Describe your second application

25) Is your second application *Industrial* or *Scientific*? Please provide us with a brief description of the application's goals and algorithms
<type your response here, max 500 words>

26) Is your second application
CPU Intensive?
Data Intensive?
A combination of both?

27) Is your second application mainly intended for
Interactive use?
Batch use?
A combination of both?

28) Quantitatively evaluate your second application in terms of	
CPU power (SpecInt2000/SpecFp2000 per second per job)	
Memory consumption per job (Megabytes)	
Disk storage needs per job (Terabytes)	
Tape storage needs per job (Terabytes)	
Number of jobs per user per year	
Number of users per year	
Network bandwidth requirements (Megabit/sec).	

29) Quantitatively evaluate which percentage of the data of your second application needs to be replicated in more than one site and the average number of copies per elementary replicated data set (e.g., file).
<type your response here>

30) Does your second application have a graphic or a command-line user interface?
<type your response here>

31) Can your second application be accessed and controlled using a web browser?
<type your response here>

32) Is your application no. 1 already interfaced to any grid middleware?
YES / NO (delete as appropriate)
33) If yes, to which middleware and in the context of which project?
<type your response here>
34) If yes to question 17, can you cite some references (less than 10) to related work?
<type your response here>

35) Does your application no. 1 need third party commercial software to run ?
YES / NO (delete as appropriate)
36) If yes, which one(s)?
<type your response here>
37) Describe the license under which your second application can be distributed on the grid infrastructure.
<type your response here, max 200 words>
38) Describe concisely the security requirements of your second application.
<type your response here, max 500 words>

39) If yes to questions 32 and 38, describe concisely what problems you foresee in successfully porting your second application to a distributed computing environment like the European Grid infrastructure?
<type your response here, max 500 words>

Section D: Describe your commitment

40) How many people / FTE's can your community dedicate over the next 12 months to port your application(s) to the grid infrastructure in collaboration with grid experts?
Not sure

41) From how many sites and with what distribution among sites?
Not sure

42) How many people/FTE's can your community dedicate in the next two years to port your application(s) to the grid infrastructure in collaboration with grid experts?
<type your response here>

43) How much and of what nature of computing and/or storage resources can your community introduce to the grid infrastructure to run your application(s) in the next 12 months? From how many sites and with what distribution among sites?
<type your response here>

44) How much and of what nature of computing and/or storage resources can your community introduce to the grid infrastructure to run your application(s) in the next 2 years? From how many sites and with what distribution among sites?
<type your response here>

45) Would your resources be made available to the EGEE Grid for use by other community members? If YES, which is the percentage of use that can be allowed to other communities for their applications?
<type your response here>

46) How many people / FTE's can your community dedicate over the next 12 months to install, upgrade and manage grid middleware the community's Sites? From how many Sites and with what distribution among them?
<type your response here>

47) How many people / FTE's can your community dedicate over the next 2 years to install, upgrade and manage grid middleware on the community's Sites? From how many Sites and with what distribution among them?
<type your response here>

Feedback

As a potential user of the EGEE Grid, you will be expanding the Grid simply by being a part of it. We are keen to expand the Grid as much as possible and to do this we need to get EGEE promoted in the right places, so the right people get to know of it. You can help us by answering the following questions relating to the EGEE Project's public profile.

How did you first hear about EGEE?
Website? *(please provide address)*
Word-of-Mouth? From A professor in my country
Publication? *(please state which)*
Event? *(please state which)*
Other? (*please specify*)

In your particular field, at which event(s) would you most expect to see EGEE Grid activities publicised or promoted?
<Information share about applications and uses in Bioinformatics>

In your particular field, in which publication(s) would you most expect to see EGEE Grid activities publicised?
<type your response here>

Which publication(s) do you read on a regular basis? (include newspapers, periodicals and any other)
Journals related with Biology, Biochemistry, and Carbohydrates; Scientific Americans

Thank you for your time.