Friends-

We have been exchanging a large amount of email that has been addressing many important issues. I'd like to attempt to bring things together a bit in order not to lose track of some of the good suggestions and important points.

Thank you for your kind words about the positive aspects of GGF2- by the time all last minute registrants were counted, GGF2 ended up having the highest attendance to date, and so we continue to grow. That is excellent. We are doing our best to grow a secretariat so that we can handle the growth of GGF, and we have extensive notes on "how to improve" that we are feeding into the GGF3 program. Please understand that we are trying very hard and that it was only last year at this time we had 120 participants, so we have nearly tripled in one year and this is challenging.

For clarity I have broken our discussion into several sections and addressed them below.

Best Regards-CeC

1. Summary

Since GF5 we have steadily increased industry participation, with the most comprehensive participation from industry to date at GGF2. As with GGF1, we intentionally oriented the GGF2 program toward local officials because these were the first GGF meetings in Europe and the US. **Table 2** shows data on number of talks and hours of program material devoted to tutorials, industry, and regional project updates. GGF1 was heavily Euro-centric; GGF2 was heavily US-centric. This was by design and I congratulate the program committees for both meetings. Now that we have had our "first" meetings in Europe and the US we will re-balance the programs to ensure that they are fully representative of the broad international community. If and when we hold a GGF meeting in Asia-Pacific we will provide a similar local-orientation for the first such event.

As we move forward, we have agreed that for the foreseeable future it is important to continue to provide education and outreach program content in addition to the foundational activities of GGF working groups and research groups. At some point we may determine that three full conferences per year is too much, and we will adjust the program accordingly. However, we fully intend to continue to emulate the Internet Engineering Task Force (IETF) in its structure, process, and schedule. It is difficult to imagine that GGF working groups could make adequate progress, and have adequate impact, if they do not continue to meet at least 3x per year.

Background information, data, and rationale for this summary can be found below.

2. Industry and User Participation

I agree that we need to think strategically about program emphasis in order to really target both users and industry. Whether this means "industry day" and "science day" I'm not sure, but I have confidence we will address this as we pull together a good GGF3 program committee. At GGF2 we tried to build on the successful industry outreach that we had done at GF5 and GGF1. Here is what we have done [1, 2, 3]

- <u>GF5</u> 5 industry talks (3 hours total), from 5 vendors(Sun, Intel, Entropia, Platform, and Battelle)
- GGF1 7 industry talks (4.25 hours total), including joint GGF1/DG forum, from 5 vendors (Sun, Level(3), IBM, Compaq and Cisco (Sun & IBM gave multiple talks))
- GGF2 13 industry talks (7 hours total), from 13 vendors and 3 industry BOFs (OpenDesign, Sun, Platform, Qwest, Cisco, Compaq, HP, Viagenie, Can-Sol, Johnson & Johnson, Boeing, Microsoft, and Cacheon)

One of the reasons we have seen increased industry participation in the GGF meetings has been a strong effort to recruit industry sponsors. Table 1 below shows the industry sponsors as of July 2000 and as of July 2001. Sponsorship levels are also shown, with Platinum sponsors contributing \$25k or above per year, Gold contributing \$10-24k per year, and Silver contributing \$5-9k per year. For completeness, non-industry sponsors are shown as well.

July 2000	July 2001	
3 Industry Sponsors	14 Industry Sponsors	
Sun Microsystems (\$30k)	Sun Microsystems (\$25k)	Boeing (\$5k)
Microsoft (\$50k)	Microsoft (\$25k to date)	Objectivity (\$5k)
VA Linux (\$10k)	Platform Computing (\$25k)	SURFnet (\$5k)
	Compaq (\$25k)	TeleCity (\$5k)
	Intel (\$25k)	Amsterdam Internet
		Exchange (\$5k)
	IBM (\$20k)	Qwest Communications (\$8k)
	UniLever (\$15k)	
	Level(3) (\$10k)	
4 Non-Industry Sponsors	9 Non-Industry Sponsors	
Argonne National	Argonne National	NASA NAS/IPG
Laboratory	Laboratory and UC CI	
NASA NAS/IPG	WTCW	NCF
SDSC	NCSA	DOE-OSCR
Northwestern University	Univ of Virginia	DOE-ASCI
		NSF-ACIR

Table 1: Growth of GGF Sponsorship Program

Mary Spada, who recently joined GGF as Executive Director of the GGF Secretariat, also put some very deliberate and strategic effort into recruiting vendors from the user/demand side (Boeing, J&J) which we had not had in the program at previous GGF meetings- we have only had tech/supply side vendors. In addition, we scheduled both a panel discussion on industry and grids and also Ian Foster and I ran a BOF on industry and grids. This was the first time we have

built into the schedule explicit interaction and reaching out to industry- indeed some of our discussion here is the result of those decisions.

And so we are improving on the industry front, but I also completely agree we need to think creatively about how to keep getting more industry, and in particular more from the user/demand side. This also relates to the point of expanding the science coverage- J&J brought a very fresh perspective as did our speaker from NIH, and Bill Feiereisen's NASA talk went well beyond the usual science suspects with examples from many disciplines including nanotechnology. Science outreach (beyond supercomputing) is an area we definitely need to concentrate on in GGF3, I agree.

3. International Participation

Another topic that has been mentioned is the "international aspect" and the US-centric feel of the GGF2 program in Washington, DC. This is important to clarify. At GGF1, the first time in Europe, we made the conscious decision to make the conference "Euro-centric." This was because we were targeting a new audience and in particular the representatives from EU funding organizations in Brussels just down the street. Similarly, because GGF2 was the first GGF in the US and it was in the home city of the US funding agencies, we targeted the general conference tracks toward them.

Now that we have done these "firsts" aimed at local funding agencies, we should indeed make the programs balanced again as much as possible. However, if and when we schedule a GGF in Asia-Pacific we will need to make sure to orient the first such program to best target the local officials as well.

It is also useful to work with the actual data from the programs rather than impressions, because with many parallel tracks any given participant will have a different view of the program, based on the sessions that they select. The program data from the GGF1 and GGF2 final agendas is shown in Table 1 below.

Content	GGF1	GGF2
Tutorials	5 topics, 13.5 hrs	6 topics, 11.5 hrs
Industry Talks/Panels	7 talks, 5 vendors, 4.25 hrs	13 talks, 13 vendors, 7 hrs
Industry BOFs	none	3 BOFs, 4 hrs
Program/Project Updates		
EU	[Host] 20 talks, 10.75 hrs	1 talk, 0.75 hrs
US	4 talks, 1.5 hrs	[Host] 10 talks, 4.75 hrs
AP	2 talks, 0.75 hrs	1 talk, 0.5 hrs

Table 2: Programmatic Analysis of GGF1 and GGF2 [2, 3]

In summary, both GGF1 and GGF2 were strongly locally oriented by design, however it is important to move forward from these "firsts" and establish a strong, international program. One obvious problem, which was my oversight, was that we had no EU or AP representatives on the program committee. For GGF1 we had no AP representatives but we did have several US people helping out. Again, having a secretariat just now spinning up, which we agreed to do at the March 2001 GFAC meeting, will help us as we move forward. Mary Spada and I are already working with our hosts in Italy and I think we will see good results from this.

4. Program Scope and Purpose in the Context of GGF Mission

With any growing organization, it is essential to keep the mission squarely in view. We initiated this organization to provide five general functions to the community of people building grids and grid technologies:

- 1. Provide a forum for discussion of common interests, problems, and solutions
- 2. Identify where "standards" can promote code sharing and interoperability
- 3. Define such "standards" where sufficient experience exists,
- 4. Present a united front to vendors
- 5. Promote "Grid" technology

With this as a set of objectives, we envisioned a semi-formal organization designed to further "Grid" computing, to be open and inclusive, not exclusively focused on a particular project, initiative, or technology, and with an IETF-like (Internet Engineering Task Force, www.ietf.org) focus, while leaving room for more speculative discussion. [4]

We have worked diligently toward these objectives, relying heavily on the method of emulating the IETF to attempt to establish GGF as a technical body that brings standards and open discussion to the middleware/grid community as the IETF has done for the Internet community. We have successfully modeled the IETF in our organization, our document series, our meeting formats and schedules, and our internal processes. This has not been a trivial task, as the work of a standards body is both complex and rigorous. [5, 6]

For the first four meetings of the organization (GF1-4) we focused exclusively on items 1-3 of the five functions above. Since GGF5, we have seen increasing demand that we focus also on items 4 and 5 where I would interpret "promote" to include education and outreach to users and industry. For discussion purposes here I will refer to items 1-3 as "manufacturing" and items 4 and 5 as "marketing." I do not in any way intend to imply that one is more or less important, only that they are different. (If you feel so inclined, you may substitute "foo" for manufacturing and "bar" for marketing.)

During the week prior to GF5 in October 2000, we had a surge in registration that clearly indicated the first signs of a strong demand for marketing. This was illustrated in the fact that our participation was up by 50% and the demographics included many non-technical people. As the one-man program committee and logistics coordinator for GF5, I responded by putting together an "updates" track [7] for GF5, recruiting speakers from the registration list. This was quite well received and we decided to expand upon it at GGF1.

My instructions to the GGF1 program committee were that (a) we must not lose sight of the requirement to provide a program for the working groups to do the work of manufacturing, but that (b) we need to put together a very strong program for marketing. Mary Spada joined us to help build a secretariat in April and I asked her to create and run a program committee for GGF2. She suggested that we concentrate on the marketing toward industry, both suppliers and users, and you can see the measurable results of her efforts in the program details earlier in this memo.

During GGF1 a number of people, including the GFAC, suggested that it was not sustainable to have a full-blown GGF "conference" three times per year, including both manufacturing and marketing. I agreed, and began to promote the idea that the summer meeting would be a "conference" with both manufacturing and marketing and the Fall and Winter/Spring meetings would be focused on manufacturing. However, it became clear to most of us during GGF2 that at this moment in time we must continue to use the GGF meetings to accomplish the marketing aspects of our mission as well. Thus we will have a full conference agenda at GGF3.

I believe that we must continue to adapt in this way, but we must also keep focusing on all aspects of our mission. I have heard several people suggest that it is too much to have grid

"conferences" three times per year, and that perhaps GGF should reduce to two meetings per year. I believe that these suggestions are quite reasonable as they apply to marketing, but they are not practical as applied to manufacturing.

At some point it very well may be that we decide that it is not reasonable or efficient to hold the marketing aspects of our meetings three times per year. However, we cannot hope to have the impact that the IETF has had in manufacturing if we relax our pace. Indeed the IETF met quarterly for its first 20 meetings, and they moved to three times per year beginning in 1990. They are preparing for their 51st meeting in August, continuing to meet three times per year. I do not believe that the IETF would have achieved the success and impact that they have accomplished had they adopted a semi-annual schedule.

As fast as technology moves today, I would be more inclined to suggest that GGF move to quarterly meetings than to relax to a semi-annual pace.

5. References

- [1] GF5 Agenda, http://www.gridforum.org/Meetings/GF5/gf5-agenda.htm
- [2] GGF1 Agenda, http://www.ggf1.nl/p-ggf1.html
- [3] GGF2 Agenda, http://www.gridforum.org/Meetings/GGF2/final-agenda.htm
- [4] Foster, Ian, Opening Remarks, GGF BOF (SC98) and GGF-1. http://www.gridforum.org/Meetings/GF1/goals%20and%20agenda%20june%2099/sld012.htm
- [5] Bradner, Scott, "The Internet Standards Process Revision 3", RFC 2026, October 1996.
- [6] Bradner, Scott, "IETF Working Group Guidelines and Procedures", RFC 2418, September 1998.
- [7] GF5 Updates Track Agenda, http://www.gridforum.org/Meetings/GF5/show-tell-track.htm

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