Minutes of the HPF+ Internal Workshop / Plenary Meeting

University of Vienna, July 15-16, 1997

Participants

ECMWF- A. Lea, G. Mozdzynski

ESI- S. Meliciani

NAS- M. Delves

NEC - G. Lonsdale

Pavia- M. Calzarossa, D. Tessera

Vienna- S. Benkner, M. Pantano, H. Zima

VCPC- P. Devillers

Tuesday 15 -Pleany Meeting

1 Welcome and Introduction

The meeting started at 9.10am with the presentation of the meeting agenda from M. Pantano.

2 Reports on Workpackages

2.1 WP1

G. Mozdzynski (ECMWF) described the Kernels version 2 (LG,LM, SL). Moreover, Mozdzynski presented the work planned for the next Kernels (Version 3) and in particular the LM Kernel (IFS transposition in Fourier space). HPF+ requirements have also been discussed.

S. Meliciani (ESI) gave a detailed description of the Kernels version 2 produced including the HPF+ porting strategies and performance results of the MPI/F90 versions.

G. Lonsdale (NEC) presented the K2-Kernel set and performance results on IBM SP2. Lonsdale presented also the NEC activities in the framework of the HPF+ project.

2.2 WP2

S. Benkner (Vienna) gave a detailed presentation of the new compiler (VFC) including all the restrictions, parallelization strategies and new HPF+ language features. M. Pantano described the new performance measurement system developed within the VFC framework.

M. Calzarossa (Pavia) presented the extension of MEDEA and detailed performance results of INDEPENDENT loops, giving information on the performance gain when the schedule REUSE strategy is applied.

M. Delves (NAS) described the contribution of NAS to the WP2.
The following working note has been distributed to the project partners.
M. Delves, D. Watson, "A Study of the HPF+ V1.1b Kernels", HPF+ Working Paper (Commercial in Confidence).

P. Devillers (VCPC) presented new ideas on the evaluation of the kernels.

2.3 WP3

No dissemination activities have been reported.

2.4 WP4

M. Pantano presented the following management activities:

2.4.1 Budget

The second payment received from the commission is distributed to the project partners as follows:

Org.	Plan. Costs	Request.	Advance	Payed 1997	Total	Balance
Vienna	480.636	480.636	240.318	158.706	399.024	81.612
ESI	422.000	211.000	105.500	94.647	200.147	10.853
ECMWF	200.000	200.000	100.000	81.011	181.011	18.989
AVL	114.228	72.114	36.057	33.227	69.284	2.830
NAS	292.500	146.250	73.125	65.922	139.047	7.203
Pavia	160.000	160.000	80.000	74.476	154.476	5.524
Total:	1.700.000	1.270.000	635.000	507.989	1.142.98 9	127.011

2.4.2 Milestones and Deliverables

The milestone

- M1.2b: Evaluation with benchmark programs Vers. 2

and deliverables

- D1.2b: Report on the evaluation of benchmark programs version 2
- D2..2b: Extension of VFCS for the compilation of project benchmarks Vers. 2

have been delayed due to the availability of the new VFC (VFCS version 2).
The following deliverables are due in December 1997 (PM 24).

- D1.1b: Final report on project benchmarks
- D1.2c: Final evaluation report
- D2.1c: HPF+: An extension of HPF for advanced industrial applications
- D2.1d: A user's Guide for HPF+
- D2.2c: Extension of VFCS for full HPF+
- D2.3b: Functional description of the performance

Note: If the project will be extended a new time schedule will be provided by the PM.

2.4.3 New Project Officer

Pierrick Fillon-Ashida

EC DG III/F2

N105 6/40

Wednesday 16 - Informal Meeting

Participants:

ECMWF-G. Mozdzynski
ESI-S. Meliciani
NAS-M. Delves

Pavia- D. Tessera
Vienna-S. Benkner, M. Pantano, H. Zima
The meeting started at 9.00am. In this technical meeting the new planned kernels, VFC restrictions and HPF+ language requirements have been discussed in detail. The "halo" specification has also been discussed.

Summary of Decisions taken

The following decisions were made:

- Next Plenary meeting will be organized by NEC in St. Augustin (Bonn) on October 23-24, 1997
- ECMWF is not interested in a time extension of the project. All the other partners have agreed to propose a time extention of the project until April 1998, with review and workshop in May 1998. M. Pantano will discuss the extension with the Commission.
- The contribution to deliverable D1.1b must be sent to G. Mozdzynski by September 1st, 1997.
- All the dissemination activities for HPF+ must be communicated to NAS (cc to Pantano)
- A proposal for the HPF+ exhibition to SC97 will be provided by Pantano.

Mario Pantano
Project Manager