

cHiPSet IC1406 Annual Report – 1st Grant Period

GP Goals

Goal:	Description
GPG1	Map the expertise of all action participants' regionally and technically dispersed expertise and contacts to foster HPC and MS routines and improve the knowledge transfer with industrial partners invited to the Action
GPG2	Specify testbeds and technological requirements and enhancements for HPC-based models, simulators and practical applications in Big Data.
GPG3	Increase awareness on the COST Action, actively reaching out to academics, practitioners, and public in general via scientific articles, position papers, press releases, and keynote talks.

WG tasks

Working Group	Tasks planned per WG	Grant Period goal(s) that it/they relate(s) to
WG1	Proposals for improvement of existing Big Data systems and middleware	GPG1, GPG2, GPG3
	Development of new systems components based on the analysis of use cases and user requirements defined by WG3 and WG4	GPG2, GPG3
	Development of guidelines for Big Data provisioning and management for modelling and simulation	GPG2, GPG3
	Cooperation and common ground with all other WGs and companies	GPG1, GPG3
WG2	Finalisation of the review of currently used programming models in the development of MS software, and the state-of-the-art parallel programming techniques in both DSL and MDE approaches	GPG1
	Initial quantification of data involved in selected MS applications, their access patterns, computation demand and typical workloads of MS pipelines	GPG1, GPG2
	Initial study of usage requirements: portability, reactivity, robustness, time-to-market, maintenance, and possible end-users	GPG2, GPG3
	Coordination with other WGs	GPG2, GPG3
WG3	Analysis of the prototypical use cases, user requirements and existing models and simulation platforms	GPG1, GPG2

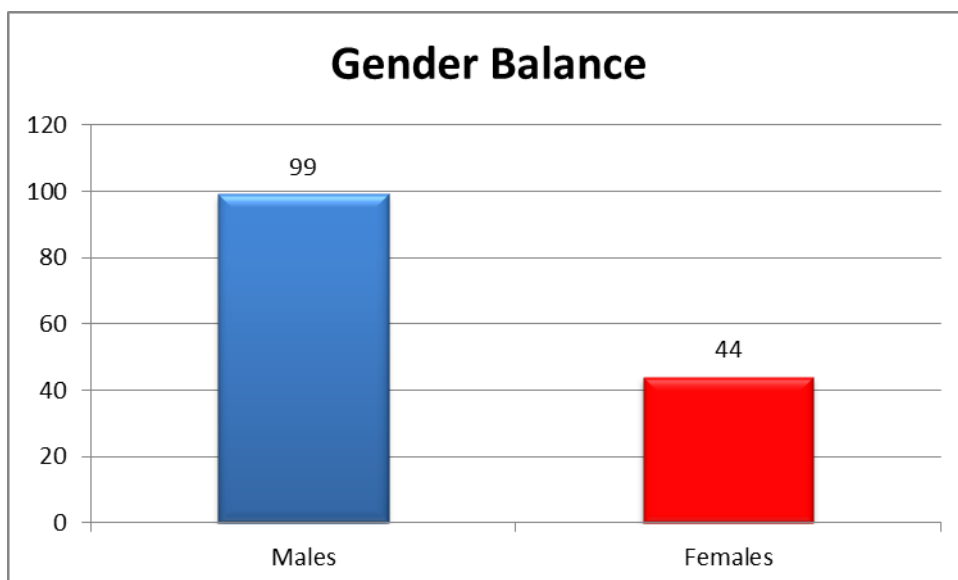
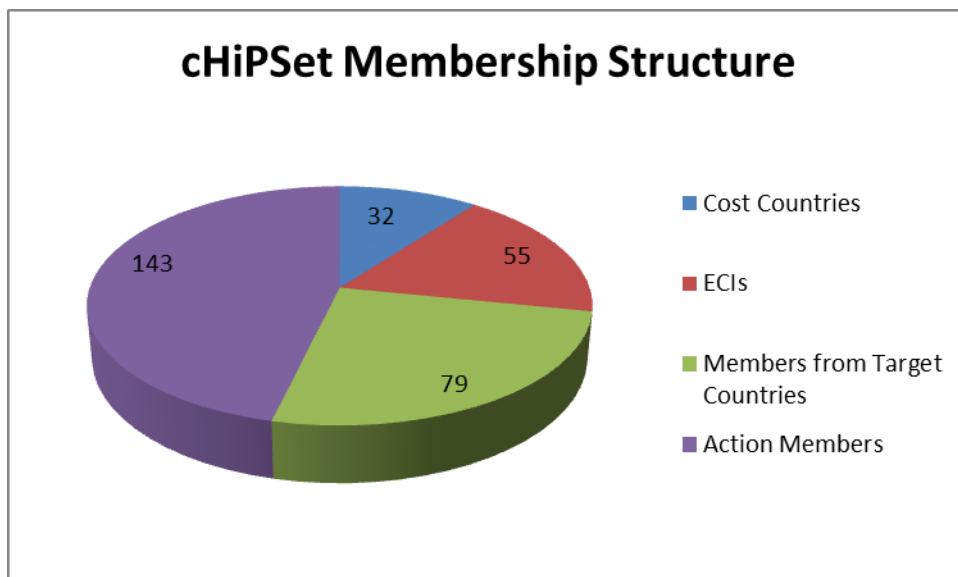
WG3	Coordination with WG1 and WG2.	GPG1, GPG3	GPG2, GPG3
	Development of innovative MS approaches	GPG1, GPG3	GPG2, GPG3
	Cooperation with WG4 on shared topics including the modelling of relevant social and economic issues in Life Sciences, like the social and epidemiological aspects of diseases.	GPG1, GPG3	GPG2, GPG3
WG4	Further analysis of the HPC requirements in socio-economical and physical science MS represented in WG4.	GPG1, GPG2	
	Coordination with WG1 and WG2 to connect HPC and MS state-of-the-art.	GPG1, GPG2	
	Dissemination of results generated within the working group within the action and to a wider audience.	GPG3	
	Coordination with WG3 regarding overlapping techniques and applications	GPG1, GPG2	

Action membership

In GP2, we accepted the application of **32nd** Cost country – Bosnia and Herzegovina. The number of participants increases compare to the GP1 to 143.

cHiPSet GP2 membership statistics:

COST Member and Acceptance Date		
AT 30/07/2015	IE 11/12/2014	RO 30/01/2015
BE 30/03/2015	IL 22/12/2014	RS 27/12/2014
BA 18/07/2016	IT 30/01/2015	SK 24/06/2015
BG 23/02/2015	LV 17/02/2016	SI 12/10/2015
HR 15/06/2015	LT 16/04/2015	ES 03/12/2014
CY 24/11/2014	LU 17/12/2014	SE 02/12/2014
EE 17/12/2014	MT 10/02/2015	CH 13/07/2015
FI 21/01/2015	NL 29/02/2016	TR 08/06/2015
FR 19/12/2014	NO 23/03/2015	UK 25/11/2014
DE 01/12/2014	PL 26/11/2014	MK 24/12/2014
EL 16/12/2014	PT 04/02/2015	



cHiPSet Meetings (<http://chipset-cost.eu/index.php/meetings-calendar/>)

In GP2 we had 2 face-to-face meetings:

- 12/12/2016 –WG meeting in Luxembourg (<http://chipset-cost.eu/index.php/luxembourg-agenda/>) – this meeting has been co-located with CloudCom 2016n (<http://2016.cloudcom.org/>)
- 27/03/2017 – GP2 final MC meeting in Palermo, Italy (<http://chipset-cost.eu/index.php/palermo-agenda/>). During the meeting the summary of the action activities in this grant period have been presented

We have organized also **23** virtual meetings of WGs and CG.

cHiPSet expertise database

The expertise database of cHiPSet members has been created. The experts work in the specified domain who are involved in the Action can be extracted from the whole consortium by using the online search application available at <http://chipset-cost.eu/index.php/chipset-expertise-database/>.

STSMs

We sponsored 16 STSM grants in GP2 : 6 for women and 10 for male participants. All beneficiaries but one were ECIs.

The list of the awarded grants is available at: <http://chipset-cost.eu/index.php/awarded-stsm-grants/>

The full STSM reports for GP2 is available here: http://chipset-cost.eu/wp-content/uploads/2017/05/STSM_Report_2nd_Grant_Period.pdf

Training School

We organized the first Action Training School in Bucharest, Romania in September 2016; The full information about the school together with the slides of the trainers' lectures is available here:

<http://chipset-cost.eu/index.php/chipset-training-school-2016/>

Dissemination Activities

The dissemination report is available here

We initialized the collaboration with BDVA (<http://chipset-cost.eu/index.php/2017/05/04/collaboration-chipset-bdva/>) and ETP4HPC (<http://chipset-cost.eu/index.php/2017/05/04/chipset-promoted-etp4hpc/>).

cHiPSet is invited and promoted by HiPEAC at the most important ICT events – we have been approved to present the Action at HiPEAC booth at ISC 17 HPC event in June 2017 in Frankfurt (Germany) (<http://chipset-cost.eu/index.php/2017/05/04/chipset-isc-17-event/>).

Research work

The annual WGs report on the realization of the tasks is available at: http://chipset-cost.eu/wp-content/uploads/2017/05/STSM_Report_2nd_Grant_Period.pdf

The cHiPSet members worked in teams on the 11 use cases. This is preliminary work which will be continued in GP3

The Special Section in SIMPAT Elsevier Journal (JCR, IF 1.3) will be published in August as vol. 76. The full information about it is available here: <http://chipset-cost.eu/index.php/2017/05/04/simpat-si-finished/>

The cHiPSet members published also in vol. 1/2017 of the JTIT Journal (<http://www.itl.waw.pl/archiwum-jtit?view=kwartalrok&rok=2017&kwartal=1>). This journal is indexed in Scopus (<http://www.itl.waw.pl/jtit-indexation>) and most of the cHiPSet publications are the results of STSM scholarships.

The list of the cHiPSet publications is available at:
<http://chipset-cost.eu/index.php/publications/>