# cHiPSet IC1406 Annual Report – 3rd Grant Period

## GP Goals

| Goal: | Description |
|---|---|
| GPG1 | Provide a world-class European MS & HPC expertise exchange, where best practices are developed for the benefit of a broad range of academic and industry stakeholders |
| GPG2 | Compile and release a consistent set of case studies on HPC & MS, which can be used as reference source by researchers and practitioners |
| GPG3 | Reach out to industry by contacting industrial research facilities and competence centers, providing expertise and services on HPC and MS applications and software development. |
| GPG4 | Establish a pan-European dissemination network to reach out to all stakeholders (academia, industry, government and the general public) and increase efficiency through the strategic use of joint forums for dissemination. |

**WG tasks**

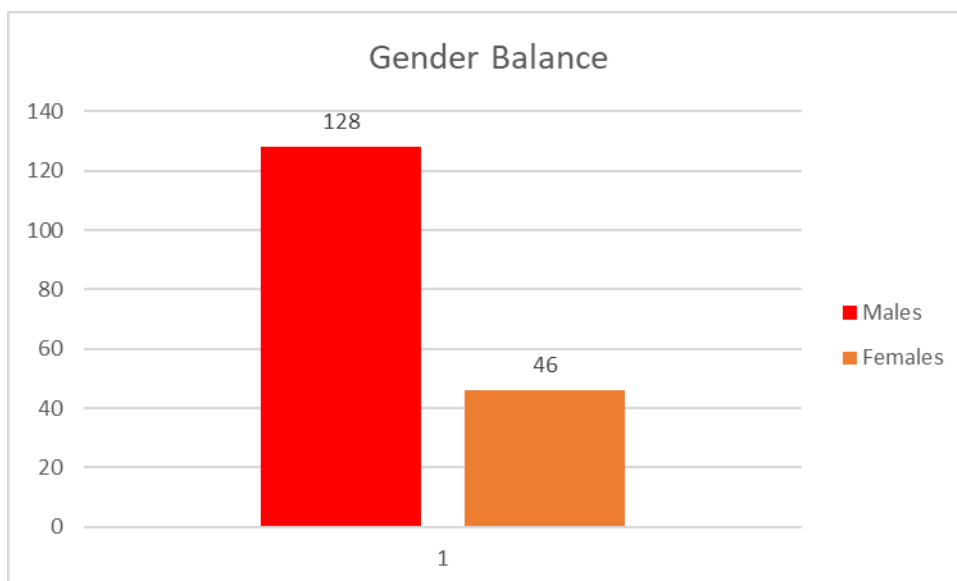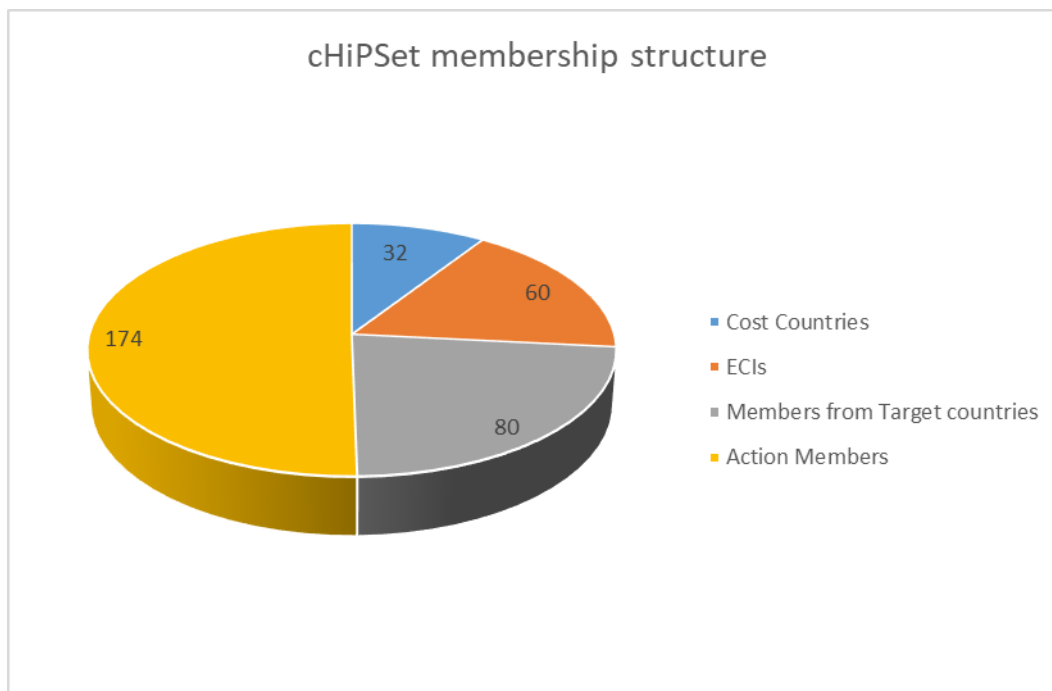| Working Group | Tasks planned per WG | Grant Period goal(s) that it/ they relate(s) to |
|---|---|---|
| **WG1** | Proposals for improvement of existing Big Data systems and middleware | GPG1, GPG2, GPG3 |
| | Development of new systems components based on the analysis of use cases and user requirements 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, GPG2, GPG3 |
|---|---|---|
| | Development of innovative MS approaches | GPG1, 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, 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 GP3, we – similarly as in GP2- we have **32** Cost countries in the consortium, but the number of participants increases compare to the GP2 from 143 to 174.

**cHiPSet GP3 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 membership structure

- Cost Countries: 32
- ECIs: 60
- Members from Target countries: 80
- Action Members: 174



Gender Balance

- Males: 128
- Females: 46

In GP3 we had 2 face-to-face meetings:

- 06/11/2017 – WG meeting in Lisbon (http://chipset-cost.eu/index.php/agenda-lisbon/)
- 27/03/2017 – GP3 final WG+ MC meeting in Fontainebleau, France (http://chipset-cost.eu/index.php/agenda-france/). During the meeting the summary of the action activities in this grant period have been presented

We have organized also **15** virtual meetings of WGs and CG.

## cHiPSet expertise database

The expertise database of cHiPSet members has been updated. 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/ .

## Case Studies

We created cross WGs Case Studies teams work on the specified topics (defined in the WGs)
The results of the work and the team structures are available here
http://chipset-cost.eu/index.php/case-studies/

## STSMs
We sponsored 17 STSM grants in GP3: 9 for women and 8 for male participants. 12 beneficiaries were ECIs.

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

## Training School

We organized the second Action Training School in Novi Sad, Serbia in September 2017; 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-2017/

## Dissemination Activities

The dissemination report is available here

cHiPSet have been presented at many external events (2 dissemination events)
more information available here:
http://chipset-cost.eu/index.php/dissemination-meetings-and-chipset-presentations/

## Research work

The annual WGs report on the realization of the tasks is available at:
http://chipset-cost.eu/index.php/reports/

New publications project applications and books have been released.

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