

## IC1406 Working Groups Annual Reports – 3rd Grant Period

### WG1

**WG Name:** Enabling Infrastructures and Middleware for Big-data Modelling and Simulation

**WG Leaders:** Ewa Niewiadomska-Szynkiewicz

WG1 structure	
Total number of members	79
Number of countries represented in WG1	21
Gender balance:	
Males	61
Females	18
Number of MC members in WG1	13
Number of young researchers (until PhD+8)	31
Number WG members from of target countries	50
Number of WG members from industry	3
Cost Tools Utilisation	
Number of STSM beneficiaries from WG1	6
Number of STSM visits hosted in institutions represented in WG1	4
Number of Cost meetings hosted in institutions represented in WG1	1
Number of WG1 members involved in Case Studies work	32
Dates of WG1 virtual meetings	05.03.2018
Realization of the workplan	
Tasks planned for GP3	1. Development of guidelines and proposals for improvement of selected Big Data systems and middleware – cooperation with WG2, WG3 and WG4

	<ol style="list-style-type: none"> <li>2. Definition of the test beds for life, social, and physical and science applications – in cooperation with WG3 and WG4</li> <li>3. Dissemination of the results</li> <li>4. Cooperation within the action, scientific community and companies</li> </ol>
<b>Tasks realized in the GP3</b>	<ol style="list-style-type: none"> <li>1. Development of guidelines and proposals for improvement of selected Big Data systems and middleware – cooperation with WG2, WG3 and WG4</li> <li>2. Definition of the test beds for life, social, and physical and science applications – in cooperation with WG3 and WG4</li> <li>3. Dissemination of the results</li> <li>4. Cooperation within the action, scientific community and companies</li> </ol>
<b>Achievements and results</b>	<ul style="list-style-type: none"> <li>• Analysis of 9 use cases and final assignment to Case Studies</li> <li>• Work on the Big Data systems middleware for defined case studies</li> <li>• Work on reports summarizing the results of CSs activities</li> <li>• Organization of scientific events as a result of inter-group collaboration</li> <li>• Dissemination activity: books, journal papers, conferences, seminars</li> <li>• Inter-group collaboration (meetings, virtual meetings),</li> </ul> <p>Dissemination activity:</p> <p>Books (editors from WG1): 1 Springer (several chapters prepared by WG1 members).</p> <p>Number of articles published/accepted in journals (authors – WG1 members): 14 papers.</p> <p>Number of conference papers written and presented at the conferences: 6 papers.</p> <p>STSM: (number of beneficiaries from WG1): 6 Summer School: number of trainees (WG1 members and PhD students supervised by WG1 members): 7 participants. Summer School: number of trainers (WG1 members): 2</p>
<b>Summary and remarks</b>	<p>Number of meetings:</p> <ul style="list-style-type: none"> <li>• Face-to-face meetings: 2</li> <li>• Telco meetings: 1</li> </ul> <p>The work on the CSs reports is in progress.</p> <p>Remarks: It is expected to rise the dissemination level of cHiPSet to common public.</p>

**WG Name:** ~~Parallel Programming Models for Big-Data Modelling and Simulation~~

**WG Leaders:** Chair: Marco Aldinucci, Italy

Vice-Chairs: Christoph Kessler, Sweden, Peter Kilpatrick, UK

WG2 structure	
Total number of members	40
Number of countries represented in WG2	20
Gender balance:	
Males	35
Females	5
Number of MC members in WG2	19
Number of young researchers (until PhD+8)	8
Number WG2 members from of target countries	13
Number of WG2 members from industry	1
Cost Tools Utilisation	
Number of STSM beneficiaries from WG2	3
Number of STSM visits hosted in institutions represented in WG2	5
Number of Cost meetings hosted in institutions represented in WG2	0
Number of WG2 members involved in Case Studies work	20
Dates of WG2 virtual meetings	Meetings delegated to use cases
Realization of the workplan	
Tasks planned for GP3	1. Finalization of the WG2 Systematic Literature Review 2. Work on use cases
Tasks realized in the GP3	1. achieved 2. ongoing as planned
Achievements and results	A Special issue in Elsevier Journal. Joint reviewed papers published across COST countries. New collaborations -some leading to publications- through STSMs. After inception by WG leaders works on Use Cases is developing across WGs, in line with overall Action Goals.
Summary and remarks	Work generally proceeds according to general Action's aims. Novel collaborations spawn from Action activities

## WG3

**WG Name:** HPC-enabled Modelling for Life Sciences

**WG Leaders:** Chair: Andrea Bracciali, United Kingdom

**Vice-Chair: Salvatore Vitabile, Italy**

WG3 structure	
Total number of members	20
Number of countries represented in WG3	13
Gender balance:	
Males	15
Females	5
Number of MC members in WG3	10
Number of young researchers (until PhD+8)	6
Number WG members from of target countries	4
Number of WG members from industry	1
Cost Tools Utilisation	
Number of STSM beneficiaries from WG3	2
Number of STSM visits hosted in institutions represented in WG3	2
Number of Cost meetings hosted in institutions represented in WG3	1
Number of WG3 members involved in Case Studies work	15
Dates of WG3 virtual meetings	Meetings delegated to use cases
Realization of the workplan	
Tasks planned for GP3	1. Finalization of special issue in Data Science and Engineering 2. Work on use cases
Tasks realized in the GP3	1. achieved 2. ongoing as planned
Achievements and results	A published joint WG3-4 special issue. Joint reviewed papers published across COST countries. New collaborations -some leading to publications- through STSMs. After inception by WG leaders works on Use Cases is developing across WGs, in line with overall Action Goals.
Summary and remarks	Work generally proceeds according to general Action's aims. Novel collaborations spawn from Action activities

## WG4

**WG Name:** HPC-enabled Modelling for Socio-Economical and Physical Sciences

**WG Leaders:** Elisabeth Larsson (chair), Esko Turunen (vice chair), Otthein Herzog (vice chair)

WG4 structure	
Total number of members	35
Number of countries represented in WG4	18

<b>Gender balance:</b>	
<b>Males</b>	23
<b>Females</b>	12
<b>Number of MC members in WG4</b>	15
<b>Number of young researchers (until PhD+8)</b>	5
<b>Number WG members from of target countries</b>	13
<b>Number of WG members from industry</b>	0
<b>Cost Tools Utilisation</b>	
<b>Number of STSM beneficiaries from WG4</b>	8
<b>Number of STSM visits hosted in institutions represented in WG4</b>	4
<b>Number of Cost meetings hosted in institutions represented in WG4</b>	2 (in GP3)
<b>Number of WG4 members involved in Case Studies work</b>	19
<b>Dates of WG4 virtual meetings</b>	Meetings delegated to use cases
<b>Realization of the workplan</b>	
<b>Tasks planned for GP3</b>	1. Finalization of special issue in Data Science and Engineering 2. Work on use cases
<b>Tasks realized in the GP3</b>	Task 1 is done, task 2 is ongoing.
<b>Achievements and results</b>	Joint WG3-4 special issue. Work plans within use cases. Joint publications across COST countries. New collaborations through STSMs.
<b>Summary and remarks</b>	Work is progressing smoothly.