

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 | <ol style="list-style-type: none"> 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"> 2. Definition of the test beds for life, social, and physical and science applications – in cooperation with WG3 and WG4 3. Dissemination of the results 4. Cooperation within the action, scientific community and companies |
| Tasks realized in the GP3 | <ol style="list-style-type: none"> 1. Development of guidelines and proposals for improvement of selected Big Data systems and middleware – cooperation with WG2, WG3 and WG4 2. Definition of the test beds for life, social, and physical and science applications – in cooperation with WG3 and WG4 3. Dissemination of the results 4. Cooperation within the action, scientific community and companies |
| Achievements and results | <ul style="list-style-type: none"> • Analysis of 9 use cases and final assignment to Case Studies • Work on the Big Data systems middleware for defined case studies • Work on reports summarizing the results of CSs activities • Organization of scientific events as a result of inter-group collaboration • Dissemination activity: books, journal papers, conferences, seminars • Inter-group collaboration (meetings, virtual meetings), <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</p> <p>Summer School: number of trainees (WG1 members and PhD students supervised by WG1 members): 7 participants.</p> <p>Summer School: number of trainers (WG1 members): 2</p> |
| Summary and remarks | <p>Number of meetings:</p> <ul style="list-style-type: none"> • Face-to-face meetings: 2 • Telco meetings: 1 <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 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 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), Ottelin Herzog (vice chair)

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

| Gender balance: | |
|--|---|
| Males | 23 |
| Females | 12 |
| Number of MC members in WG4 | 15 |
| Number of young researchers (until PhD+8) | 5 |
| Number WG members from target countries | 13 |
| Number of WG members from industry | 0 |
| Cost Tools Utilisation | |
| Number of STSM beneficiaries from WG4 | 8 |
| Number of STSM visits hosted in institutions represented in WG4 | 4 |
| Number of Cost meetings hosted in institutions represented in WG4 | 2 (in GP3) |
| Number of WG4 members involved in Case Studies work | 19 |
| Dates of WG4 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 | Task 1 is done, task 2 is ongoing. |
| Achievements and results | Joint WG3-4 special issue. Work plans within use cases. Joint publications across COST countries. New collaborations through STSMs. |
| Summary and remarks | Work is progressing smoothly. |