

Erasmus + KA2: Cooperation for innovation and the exchange of good practices

Knowledge Alliances



Enabling SMEs to gain competitive advantage from the use of HPC

Regional Workshops Final Report

Introduction

This deliverable will consist of a total of four regional workshops with regional partners from the business community in the pilot regions of Ireland, Romania and Slovenia. These 5 events were moderated in such a way as to contribute to strategic dialogue between HEIs and business/enterprise community, as well as to disseminate information about **SME/HPC**. During these sessions a number of aspects were discussed:

Romania:

- Informing attendees on the potential of HPC for SMEs
- The need to produce and to delivery faster, to increase efficiency and productivity and to manage large amount of data.
- Participants worked in small groups and looked for regional, national and international HPC knowledge providers and, starting from these, together with those stakeholders experienced, discussed about how they could benefit from using HPC.

Ireland

- Informing attendees on the potential of HPC for SMEs
- Administering a survey on HPC awareness.
- Contact information of potential regional stakeholders to contribute for the SME/HPC project
- Strategic dialogue between HEIs and the business community in South East Ireland regarding HPC;
- Dissemination of information about the SME/HPC Project. Business owners who were present were surprised by the number of applications that HPC has, which can benefit their own enterprises but also the city of Waterford. They also understood the value of the SME/HPC and, as a result, their contact details are going to be used for the next project undertaking.

Slovenia

- To gather regional stakeholders at an event where information can be obtained along with exploring their views and expectations from the future work in the field of bridging the gap between HPC at HEI and SMEs.
- Discussion about enterprises' needs, HPC situation and the role of HEI. The main conclusion was that the South east region of Slovenia is well developed, also cooperation among HEI and SMEs is somewhat good but more promotion must be done, to outline the benefits of HPC usage.
- There are many good opportunities to enhance cooperation via EU funded and nationally funded projects. As main held back was mentioned the sensitivity of the SMEs to technological changes.
- The question of IPR rights emerged, with SMEs usually not having the knowledge to protect their rights, so they rather not decide to cooperate with HEI and HPC centres.



- Discussion about enterprises' needs, HPC situation and the role of HEI. Thus, the discussion also focused on success stories and good practices of HPC usage by small and medium enterprises from different sectors and the importance of technology transfer. It was emphasised, there are many good opportunities to use HPC to solve their own problems.
- Participants were offered a networking opportunity. Thus, participants exchanged ideas and agreed on close cooperation also in the future.

At the same time, the main challenge that the organisers encountered was in attracting stakeholders. Thus, the stakeholder showed little or no interest in the events. Nevertheless, the organisers managed to collect and analyse the necessary information for the project obtained from those that have participated

Regional Workshops

Workshop No.1

Date and Location

- **Date: 25 April 2018**
- **Location: Palatul Universul, Bucharest**

Agenda

Hours	Session
15.15-15.30	Welcome and registration
15.30- 15.45	Presentation of Enabling SMEs to gain competitive advantage from the use of HPC (SME/HPC) project
15.45-16.45	Round table discussion about enterprises' needs
16.45-17.00	Understanding key HPC benefits Thematic presentation of HPC International Good practices



17.00-17.30	Final remarks and Networking
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Summary of discussions

The workshop aimed to introduce SME/HPC project to regional stakeholder and to start the strategic dialogue with and between regional enterprises and higher education institutions.

The workshop was attended by 15 participants who included representatives of business community, of HEIs and NGOs coming from various sectors (urbanism, software, services, automotive) and SME/HPC regional project team.

In the first session, SME/HPC regional project team introduced the SME/HPC project and gave a short presentation about what HPC is.

The second session was a round table discussion about enterprises' needs. The main aspects underlined were connected to the need to produce and to delivery faster, to increase efficiency and productivity and to manage large amount of data.

The third session was a debate about how HPC could respond to these needs. As the majority of participants had low or little knowledge about HPC, the regional SME/HPC team used the the experience of InnoHPC project, funded under Danube Transnational programme and started the session from the video related to what is HPC available at <https://www.youtube.com/watch?v=Tik7NMbnG4U&feature=youtu.be>. Then participants worked in small groups and looked for regional, national and international HPC knowledge providers and, starting from these, together with those stakeholders experienced, discussed about how they could benefit from using HPC.

At the end of the workshop, a half an hour for networking activity was allocated, giving to participants the opportunity to exchange ideas, creating the basis from strategic dialogue.

In order to improve the quality of future events, feedback forms were distributed to the participants and at the end of the conference and, after completion they have been collected by the project team. The general feedback was positive and stakeholders mentioned the idea of continuing collaboration. -

Photos of the workshop



Workshop No.2

Date and Location

- **Date: 9th June 2018**
- **Location: ArLabs Research and Innovation Centre, Ireland**

Summary of discussions

High-Performance Computing (HPC) is the application of "supercomputers" to computational problems that are either too large for standard computers or would take too long (National Institute for Computational Sciences). Based on the potential that this type of device can have on Micro, Small and Medium-Sized (SMEs), SME/HPC, a tailor-made HPC education programme for SMEs, takes a pioneering step towards improving the awareness about the innovative potential of HPC by SMEs by co-designing tailor-made courses delivering a coherent set of competences required for the application of HPC in SME and micro-enterprise contexts.

Waterford Institute of Technology (WIT) presents in this report the level of awareness on HPC potential of key regional stakeholders from South-East Ireland that were present at the Dissemination Event on the use of High Performance Computing (HPC) that took place in WIT West Campus on 9 of June, 2018. On the occasion, a survey with a questionnaire on awareness on HPC potential was administered to representatives of Higher Education Institution (HEIs), government bodies and SMEs. This survey is expected to contribute with valid information for developing innovative strategies for raising HPC awareness and building HPC skills in South-East Ireland.

Dissemination Event on the use of High Performance Computing (HPC)

The objective of the event was threefold. First, it aimed at informing attendees on the potential of HPC for SMEs and also South-East Ireland. Second, it aimed at administering a survey on HPC awareness. Third, it aimed at obtaining contact information of potential regional stakeholders to contribute for the SME/HPC project.



Pictures of the SME/HPC Dissemination Event



Dissemination of the SME/HPC projects

Date and Location

- **Date: 18th October 2018**
- **Location: WIT Arena, Ireland**

Summary of discussions

Waterford Institute of Technology (WIT) presents in this report the interaction and engagement of potential of key regional stakeholders from South East Ireland during the Crystal Valley Tech (CVT) Summit on the 18th of October, 2018. The Crystal Valley Tech summit featured talks on the latest trends in technology, as well as demonstrating the opportunities for employment in the region. Advanced Tech seminars were held in the afternoon, which cover topics from data mining to e-health and cyber security.

South East's community of Information and Communications Technology (ICT) companies assembled to promote the region's burgeoning reputation in leading edge technology development. The morning session consisted of a Tech Showcase which was open for second and third level students in addition to industry members and the general public by providing a platform for them to talk to the founders, leaders and employees of over 100 regionally based tech companies. WIT was involved in the Tech Showcase where we interacted and engaged with students and other companies in the region. This event was also used as an opportunity to identify potential key stakeholders for the benchmark audit (D3.3) and for future workshop and dissemination activities.

Pictures from the Crystal Valley Tech (CVT) Summit





Workshop No.3

Date and Location

- **Date: 25 October 2018**
- **Location: Faculty of Information Studies in Novo mesto**

Agenda

Hours	Session
10.45-11.00	Welcome and registration
11.00-11.15	Presentation of Enabling SMEs to gain competitive advantage from the use of HPC (SME/HPC) project
11.15-12.15	Round table discussion about enterprises' needs, HPC situation and the role of HEI.



	<p>Speakers:</p> <p>Iris Fink Grubačevič (Faculty of Industrial engineering, dean) Simon Jeraj (Novo mesto Developmental center) Tomaž Besek (360ecm, director)</p>
12.15-12.30	<p>How can SME benefit from HPC – thematic presentation of Pilot action open call within InnoHPC Interreg DTP project</p>
12.30 -	Final remarks and Networking at lunch

Summary of discussions

The main aim of the workshop was to gather regional stakeholders at an event where information can be obtained along with exploring their views and expectations from the future work in the field of bridging the gap between HPC at HEI and SMEs. The idea to start nurturing strategic dialog was behind the motives to structure the agenda the way it was structured.

The workshop was attended by 22 participants who included representatives of business community, of HEIs and other stakeholders from the region, who deal with development of supporting environment for SMEs, SME/HPC regional project team, and SME/HPC UK team.

In the first session, SME/HPC regional project team introduced the SME/HPC project and gave a short presentation about what HPC is.

The second session was a round table discussion about enterprises' needs, HPC situation and the role of HEI. The main conclusion was that the South east region of Slovenia is well developed, also cooperation among HEI and SMEs is somewhat good but more promotion must be done, to outline the benefits of HPC usage. It was emphasised, there are many good opportunities to enhance cooperation via EU funded and nationally funded projects. As main held back was mentioned the sensitivity of the SMEs to technological changes. Additionally, the question of IPR rights emerged, with SMEs usually not having the knowledge to protect their rights, so they rather not decide to cooperate with HEI and HPC centres.

In the last session we offered a short introduction into another HPC related project and their initiatives – the open call for the SMEs to participate in testing of virtual ecosystem for SMEs, HPC competence centres and HPC services Centres.

At the end of the workshop, participants were offered a networking opportunity together with lunch. Participants exchanged ideas and agreed on close cooperation also in the future.

Photos of the workshop



Workshop No.4

Date and Location

- **Date: 12 December 2019**
- **Location: Podbreznik Business Incubator, Novo mesto**

Summary of discussions

The main aim of the workshop was to gather regional stakeholders at an event where information can be obtained along with exploring their views and expectations from the future work in the field of bridging the gap between HPC at HEI and SMEs. As a result, the workshop was in a format of an informal discussion with SMEs over a “HPC with breakfast” session.

The workshop was attended by 12 participants who included representatives of business community, of HEIs and other stakeholders from the region, who deal with development of supporting environment for SMEs and SME/HPC regional project team.

Firstly, the SME/HPC regional project team introduced the SME/HPC project and gave a short presentation about what HPC is. Secondly, there was a discussion about enterprises’ needs, HPC situation and the role of HEI. Thus, the discussion also focused on success stories and good practices of HPC usage by small and medium enterprises from different sectors and the importance of technology transfer. It was emphasised, there are many good opportunities to use HPC to solve their own problems.

At the end of the workshop, participants were offered a networking opportunity with breakfast. Participants exchanged ideas and agreed on close cooperation also in the future.

Photos





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Workshop No.5

Date and Location

- **Date:** 16 January 2020
- **Location:** ArLabs Research and Innovation Centre, Waterford Institute of Technology, Waterford, Ireland

Agenda

Hours	Session
10.30-11.00	Welcome and registration
11.00- 11.30	Chamber Development Meeting
11.30-11.40	The SME/HPC Project
11.40-12.00	HPC for SMEs
12.00-12.30	TSSG



12.30-13.00	Visit to supercomputer Kay
13.00-13.30	Final remarks and Networking

Summary of discussions

There were 15 participants in total in this regional workshop, divided among business owners (11) and HEI staff (4). Thus, over 73% of the attendants were from businesses in Waterford. This event was made possible by initiative of the WIT SME/HPC team to support a Waterford Chamber of Commerce (WCC) meeting to be held in ArcLabs Innovation & Research Centre (WIT). The organisers of the event, from WCC, gave a slot of time for the SME/HPC Project to promote its activities as well as to present on HPC for SMEs. The discussions were initially around recent developments in the city, subsequently they moved around supercomputers, HPC and ICT solutions in general. The environment was very positive to talk about HPC.

The slot of time that was run by the SME/HPC Project can be summarized as follows. There was a ten-minute presentation about the project (objective, work packages, products and questions for discussion) followed by a twenty-minute presentation on the benefits of HPC for SMEs. At the end of the event, there was a tour to Kay, the supercomputer hosted in WIT.

The objectives of the workshop were twofold, (1) to contribute to a strategic dialogue between HEIs and the business community in South East Ireland regarding HPC; and (2) to disseminate information about the SME/HPC Project, which were both successfully met. Business owners who were present were surprised by the number of applications that HPC has, which can benefit their own enterprises but also the city of Waterford. They also understood the value of the SME/HPC and, as a result, their contact details are going to be used for the next project undertaking.

Photos of the workshop at ArcLabbs



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