EuroCC2 Periodic Report Y2

Work Package 03: NCC Bulgaria			
Activities Y2 (1.01.2024 – 31.12.2024)			
Task No (continuous numbering linked to WP)	Task Name	Implemented? (Yes/No/Partially)	Justification (explain what was done and by whom; explain what was not done and why not; indicate how you intend to handle the situation and new timing; indicate if it was a one-off issue or how you intend to avoid similar issues in the future)
T3.1	NCC Management	Yes	The management and coordination of NCC-Bulgaria was performed. The work has been planned in detail and monitored, and results regularly analysed. Regular meetings of the NCC Bulgaria management team (twice per month), internal thematic groups meetings (every week) and two all-hands meetings (in person) were organized. Regular communications with EuroCC2/CASTIEL2, Ministry of Education and Science in Bulgaria and NCC Bulgaria Advisory Board were conducted. We participated in the EuroCC2 AHM meeting in Slovenia, and in all online WPL meetings and workshops organized by PMT. Updated NCC Bulgaria Roadmap (2023-2025) with detailed description of Y2 activities was developed and presented The project deliverables and the quarterly technical progress and financial reports were prepared and submitted to the project coordinator on time. Work on sustainability. (Done by NCC Bulgaria Management Team, consisting of WPL, deputy WPL, task leaders and financial manager.) *Internal task specific KPI: Organisation of Open AHM meeting* – achieved, held on 11 April 2024, in person, IICT.
T3.2	Training and Skills Development	Yes	In Task 3.2 we built upon the training portfolio of the NCC by extending it to support the users in adoption of the national HPC resources as well as those available in EuroHPC. Training was promoted to new communities with low current usage of HPC+. In the period M13-M24 we conducted (in total) **44 training events** with more than 400 participants in total. Seven best practice training guides were developed, published and distributed. Extensive training materials and presentations were distributed to the interested participants. Feedback from training was analysed and contributed to adapt and improve the subsequent delivery of training services. The training activities explored the collaboration within the national HPC ecosystem and synergies with EuroCC2, CASTIEL2, NCCs, CoEs, other European initiatives and projects. Bulgarian HPC experts and users participated in more than 40 training workshops, seminars and courses organized by CASTIEL2/NCCs/CoEs which were very useful to exchange expertise and experience. Presentations from the NCC were given in 5 of these events (at 2

			organized by CASTIEL2, 1 organized by PMT, 1 organized by NCC Latvia and 1 organized by NCC Romania). The collaborative work to prepare EuroCC2 tutorial for ISC2024 with other NCCs was a notable success and continued with preparation of EuroCC2 tutorial for ISC 2025. (Done by NCC Bulgaria Management team, training champions and training experts. All partners – IICT, SU and UNWE – contributed.) *Internal task specific KPI: 20 training events, organized by the NCC Bulgaria* – overachieved (44 training events organized)
T3.3	Service to and Interaction with Industry	Yes	In Task 3.3 we continued the existing collaborations with industry and enhanced and maintained the service portfolio to address SMEs and larger industry, in coordination with Task 3.5. Technical and technological expertise and consulting was provided to a wide range of SMEs/start-ups and big industry. In 2024, we interacted with more than 80 SMEs, companies, associations and clusters. 22 memoranda for collaboration were signed. Technical consultations to 62 companies were given, with some companies expressing interest in deeper further collaboration. Eight industrial success stories were released. From the training events held in Task 3.2, users from SMEs and industry participated in more than 30, while 10 training events were specifically organized for end-users from SMEs and big industry, which were a basis for follow-up discussions and consultations. The service portfolio of NCC Bulgaria was presented specifically for SMEs and industry at 11 meetings/events organized by NCC Bulgaria. 3 events were held for presenting the FORTISSIMO Plus call, providing guidelines and possibilities for collaboration. Representatives from NCC Bulgaria participated at 8 external large industrial forums held in Bulgaria. The adopted sector-based approach is executed through meetings with representatives of industry chambers and associations, as well as innovative SMEs/startups. Regular contacts with CASTIEL2 WP4 and participation in Industrial WG meetings were performed. (Done by NCC Bulgaria Management team, industry champions and experts. All partners – IICT, SU and UNWE – contributed.) *Internal task specific KPI*: Number of collaboration activities with industry and SMEs (10)– overachieved (73 - 11 workshops/seminars, 62 consultations) Number of Success Stories (3) – overachieved (8).
T3.4.	Services to and Interaction with Academia and Public Administration	Yes	In Task 3.4, services for academia and public administration were provided. Leveraging our extensive contacts with large scientific user communities, we were able to provide technical and technological expertise for diverse user groups. Consultations based on extensive in advanced

			technologies such as simulation and modelling algorithms, software codes or tools for quantum simulators & computers were delivered to the interested end users. During the period, 6 thematic consultations for end-users and application developers in LLM and ML, Climatology, Computer Algebra, Bioinformatics and others were given; Services were delivered to 4 RIs consortia CLADA-BG, NGIC, LTER-BG, DISCO, which include a total of 26 research organizations. Consultations to proposals preparation with regards to use of HPC equipment and codes was provided with 3 projects successfully funded in December 2024. Three seminar presentations and guided tours to the supercomputer HEMUS located at IICT were given. The NCC Bulgaria organized and conducted four thematic HPC workshops for academia and public administration where the NCC Bulgaria services, success stories and use cases were presented. Discussions and consultations for public administration were organized and conducted – 6 Memoranda for collaboration were signed and 5 consultations given. The NCC Bulgaria was presented with presentations at 11 external events for participants from academia or public administration. (Done by NCC Bulgaria Management team, competence champions and senior experts. All partners – IICT, SU and UNWE – contributed.) *Internal task specific KPI*: No. of thematic workshops/consultations for academia and public administration (4) – overachieved (13 - 4 workshops, 9 consultations)
T3.5	Service Portfolio and Competence Management, Additional Services	Yes	We integrated the services developed within the other tasks and general services identified within this task into a comprehensive NCC service portfolio. The updated D1.19 List of NCC Bulgaria Services was prepared and submitted. Also, we continue to update the competence mapping, using the newly adopted categorisation, adding new competences and gathering more information about the research teams with HPC-related expertise. More than 20 researchers contributed to the “Mapping competences in the EuroCC2 Network” survey. The current status has been presented at a conference and published in a paper. Team members participated in the meetings of Competence & Networking WG, organized by CASTIEL2, in the events organized by EuroCC2, CASTIEL2, other NCCs and CoEs, as well as several national level meetings. The services are now being used, including by industrial/SME users. During meetings with current and prospective users, feedback about desired services was gathered and analysed. Following the internal EuroCC2 discussions, we decided to prepare for the adoption of the Waldur platform.

			(Done by NCC Bulgaria Management team, competence champions and senior experts. All partners – IICT, SU and UNWE – contributed.) *Internal task specific KPI:* *Publication/post about competences/service portfolio (1) – achieved* (paper published: Atanassov, E., Karaivanova, A., Gurov, T., HPC Ecosystem and Competences in Bulgaria. Digital Presentation and Preservation of Cultural and Scientific Heritage, 14 IMI-BAS, 301-310, 2024, DOI: https://doi.org/10.55630/dipp.2024.14.30)
3.6	Collaboration	Yes	In this task we report two groups of collaborations: Interactions within EuroCC2 and CASTIEL2 and general collaboration with the EuroHPC ecosystem, as well as with HPC related national networks were implemented: In total, we participated in 118 events, organized by CASTIEL2, EuroCC2/PMT, other NCCs, CoEs, and other initiatives (e.g., FORTISSIMO Plus). Members of the team participated in the following series of workshops/webinars: “Code of the month”, “Industry sector of the month”, EuroCC2 PMT workshops, meetings of training champions, industry champions, competence and communication champions, WPL monthly meetings, etc. NCC Bulgaria continues and extends the collaborations with other NCCs – especially successful was collaboration between NCCs Cyprus, Bulgaria, Germany, Netherlands, Turkiye, Italy for ISC2024 tutorial (now continuing with preparation of ISC 2025 tutorial). We participated in joint activities with NCCs Estonia, Latvia, Sweden, Romania, Austria, etc. Successful collaboration was started with CoE BIOEXCELL – three meetings held and a the NCC is helping in preparation of their training event that will be held in Bulgaria. Events organised by CASTIEL2 and other NCCs were announced through our web portal and distributed via e-mail and, thus, well participated. National collaborations: EDIH Zagore, EDIH Trakia, Bulgarian CoEs in ICT, large national RIs projects, projects funded by NCF-Bulgaria, Bulgarian teams of EU funded projects with interest in HPC. We have organized various events and meetings with their teams. Four large RIs and 2 EDIHs participated in the HPC conference 2024 in Sofia presenting the results of our collaboration. (Done by NCC Bulgaria Management team and experts. All partners – IICT, SU and UNWE – contributed.) *Internal task specific KPI:* No. of NCCs/CoEs involved in cooperation activities (5) – overachieved (11+)
3.7	Awareness Creation and Communication	Yes	Updating and maintaining the main web portal of NCC Bulgaria (149 news articles posted) and solid social media presence on LinkedIn and X were ensured (71 posts in total). 14 blog posts, 8 success stories are developed and posted during the year. Four issues of

			the NCC Bulgaria newsletter were prepared and distributed. Various promotional materials: banners, posters, flyer, brochure (available for downloading from the portal) were developed/updated and used in the various events. NCC Bulgaria organised 6+ dissemination events with 300+ participants, including annual conference HPC 2024 in Sofia, Open AHM of NCC Bulgaria (with participation from external experts and some SMEs), four thematic workshops, many seminars and webinars. NCC Bulgaria was presented at 14 external events (audience 400+ reached) including 4 conferences held in Bulgaria, 7 industrial forums, Open Doors events, National Information Day of Open Science, etc. This task also supports Tasks 3.2, 3.3 and 3.4 in their activities: distributing information to users groups, ensuring tailored dissemination materials to industry, academia and public administration, etc. (Done by NCC Bulgaria Management team, communication champions and experts. All partners – IICT, SU and UNWE – contributed.) *Internal task specific KPI:* No. of dissemination events, organized by NCC Bulgaria (4-5) – overachieved (6+) No. of promotional materials developed by NCC Bulgaria (3) – overachieved (5) No. of success stories (4) – overachieved (8) No. of newsletters (4) – achieved (4)