

°EuroHPC JU Centres of Excellence and CASTIEL 2 COLLABORATION AGREEMENT

THIS AGREEMENT BETWEEN:

The CASTIEL 2 project (Grant Agreement number 101102047) is a project under a DEP Grant agreement of the DIGITAL-EUROHPC-JU-2022-NCC-01-02 call, hereinafter called “CASTIEL 2”. The Centres of Excellence (listed below, hereinafter called jointly “Centres of Excellence” or “CoEs”) have been established within the Horizon Europe Programme (HEU) under the calls HORIZON-EUROHPC-JU-2021-COE-01 or HORIZON-EUROHPC-JU-2021-COE-02, namely the *European Centre of Excellence for Engineering Applications on HPC and associated technologies*, hereinafter called “EXCELLERAT P2” (GA number 101092621); the *Centre of Excellence for Weather and Climate Phase 3*, hereinafter called “ESiWACE3” (GA number 101093054); the *BioExcel Centre of Excellence for Computational Biomolecular Research*, hereinafter called “BioExcel-3” (GA number 101093290); *Materials design at the eXascale*, hereinafter called “MaX” (GA number 101093374); *HPC and Big Data Technologies for Global Challenges*, hereinafter called “HiDALGO2” (GA number 101093457); *Scalable Parallel and distributed Astrophysical Codes for Exascale*, hereinafter called “SPACE” (GA number 101093441); the *Centre of Excellence for Exascale CFD*, hereinafter called “CEEC” (GA number 101093393); the *Centre of Excellence in exascale-oriented application co-design and delivery for multiscale simulations*, hereinafter called “MultiXscale” (GA number 101093169); the *Centre of Excellence for Exascale in Solid Earth - Second Phase*, hereinafter called “ChEESE-2P” (GA number 101093038); and the project *Plasma Exascale-Performance Simulations CoE - Pushing flagship plasma simulations codes to tackle exascale enabled Grand Challenges via performance optimisation and codesign*, hereinafter called “Plasma-PEPSC” (GA number 101093261), and under HORIZON-EUROHPC-JU-2023-COE-01, namely the *Performance Optimisation and Productivity 3 CoE* called “POP3” and the *Energy-oriented Centre of Excellence* called “EoCoE-III” (predicted start date of the latter two 01.01.2024), subject to the funding of these projects.

The Parties of the above listed Centres of Excellence established within the EuroHPC JU and of the CASTIEL 2 project shall accede to this EuroHPC JU CoE and CASTIEL 2 Collaboration Agreement (hereinafter “Collaboration Agreement”) by the signature of the respective CoE Project Coordinator or by direct signature of said Party. The authorisation to sign and to represent the specific CoE in this Collaboration Agreement on behalf of the Beneficiaries and Associated Partners (who have signed the relevant CA) of the said projects shall be given to the respective Coordinator by each Party in writing.

Hereinafter, each Beneficiary and Associated Partner of the above listed projects is individually referred to as “Party” and jointly referred to as “Parties”.

Preamble

1. The mission of the activities established under the calls HORIZON-EUROHPC-JU-2021-COE-01 and HORIZON-EUROHPC-JU-2021-COE-02 is to support research and innovation actions that will develop and adapt HPC applications for the exascale and post-exascale era. Adapting existing applications to exascale computing capability requires significant changes and in some cases current application codes cannot run on exascale or post-exascale systems without a complete rethink or substantial code rewrite. The activities under the call Centres of Excellence preparing applications in the Exascale era (HORIZON-EUROHPC-JU-2021-COE-01) will advance Lighthouse Exascale Applications, at the frontier of technology and relevant for the communities of HPC users, that enable and promote the use of upcoming exascale and post exascale computing capabilities in collaboration with other High-Performance Computer (HPC) stakeholders. The goal is to develop or scale up existing parallel codes towards exascale performance, resulting into tangible benefits mainly for scientific challenges. The activities

established under the call Centres of Excellence for supporting supercomputing applications for Science and Innovation (HORIZON-EUROHPC-JU-2021-COE-02) address scientific and industrial applications and user communities that run world leading codes or ensembles that aggregate to pre-exascale workloads, and may require exascale resources in specific cases. The call HORIZON-EUROHPC-JU-2023-COE-01 brings forward Centres of Excellence advancing specific Lighthouse Exascale Applications, at the frontier of technology and relevant for the communities of HPC users, that enable and promote the use of upcoming exascale and post exascale computing capabilities in collaboration with other High Performance Computer (HPC) stakeholders. Should further Centre of Excellence projects be selected in currently open or upcoming Calls for Proposals of the EuroHPC JU and these be invited by the EuroHPC JU to collaborate with the CoE projects in this Agreement and CASTIEL 2, they too will be invited to accede to this Collaboration Agreement.

2. The CASTIEL 2 activity (under GA 101102047) aims at support and coordination for the increasing overall level of competence in delivering HPC (and associated technologies) to academia, public administration and industry. CASTIEL 2 sets up the framework and will act as a reference point for the National Competence Centres and Centres of Excellence to collaborate with each other and exchange best practices and knowledge, all for strengthening the European HPC landscape and to offer best possible support to the user groups of these important technologies.

The present Collaboration Agreement aims at setting the rules of this collaboration by defining the rights and obligations of each Party involved in the CoEs and the CASTIEL 2 project. Thereby, it aims only to govern the relationship between the Parties not belonging to the same project. The relationship between the Parties belonging to the same project (the parties within each CoE activity listed above or, respectively, the parties within the CASTIEL 2 project under GA number 101102047) are exclusively regulated in the relevant Grant Agreements and Consortium Agreements of these projects.

3. In the Grant Agreement of each of the CoEs and CASTIEL 2 project, Article 7 “BENEFICIARIES” states a.o. the following:

*„For **linked actions**, the beneficiaries must have **arrangements** with the participants of the other action, to ensure that both actions are implemented and coordinated properly.*

*If required by the granting authority (see Data Sheet, Point 1), these arrangements must be set out in a written **collaboration agreement** with the participants of the other action or, if the consortium is the same, as part of their consortium agreement, covering for instance:*

- the internal organisation and decision-making processes*
- the areas where close collaboration/synchronisation is needed (e.g. on management of outputs, common approaches towards standardisation, links with regulatory and policy activities, common communication and dissemination activities, sharing of information, access to background and results, etc.)*
- settlement of disputes*
- liability, indemnification and confidentiality arrangements between the beneficiaries in both actions.*

The arrangements with the participants of the other action must not contain any provision contrary to this Agreement.”

The Data Sheet (Point 1) of the Grant Agreement of the CoEs states the necessity for a Collaboration Agreement with CASTIEL 2 (and vice versa) and the remaining CoEs.

4. The purpose of this **Collaboration Agreement** is to enable the Parties to comply with this clause in Article 7 and the Data Sheet (Point 1), (to be) included in all respective Grant Agreements.

IT IS NOW AGREED AS FOLLOWS:**1. DEFINITIONS**

1.1 Words beginning with a capital letter shall have the meaning defined herein, and where not defined here they shall, for each of the CoE and CASTIEL2 action, have the meaning defined either in the Rules for Participation (defined below) or in the Grant Agreement or in the specific Consortium Agreement for the respective CoE project and the CASTIEL 2 project.

1.2 Additional Definitions

Accession Date means, for each Party, the date of the signature of this Agreement by the relevant authorized Project Coordinator or the date of signature of the Declaration of Accession by the relevant authorized project Coordinator.

An **Affiliated Entity (AE), or Affiliates**, to the beneficiary (following EU Financial Regulation Article 187 Affiliate entities and sole beneficiary. Article 187(1) (a) and (b) of the EU Financial Regulation) are Entities that

- a) form the sole beneficiary
- b) have a link to the beneficiary, in particular a legal or capital link, which is neither limited to the action nor established for the established for the sole purpose of its implementation’.

Associated partners (AP) — Entities which participate in the actions, but without the right to charge costs or claim contributions. Their list is available in the current Grant Agreements of the affected projects.

Collaboration Agreement (COLA) means this EuroHPC JU Centres of Excellence (CoEs) and CASTIEL 2 Collaboration Agreement, its annexes and amendments, according to clause 7.4 below.

Competence Centre and CoE Coordination Committee (C5): The Competence Centre and CoE Coordination Committee consists of all Work Package Leaders of CASTIEL 2.

Confidential Information (as per art. 13 of the Grant Agreement) means any information, data, document or other material (in any form) of whatever nature disclosed by any Parties of the CoE projects to any Parties of the CASTIEL 2 project or by any Parties of the CASTIEL 2 project to any Parties of the CoE projects (“Disclosing Party”) or disclosed between any Parties of the CoE projects in connection with this Collaboration Agreement after acceding to this Collaboration Agreement, irrespective of the medium in which such information, data, documents or material is embedded, subject to the various exclusion and other provisions set forth in clause 4.6 below, and,

- when disclosed in tangible form, is marked “confidential” by the Disclosing Party, and
- when disclosed orally or visually, is identified at the time of disclosure as confidential and confirmed in writing (including e.g. in meeting minutes) as being confidential within fifteen (15) calendar days after such disclosure.

Declaration of Accession means a declaration in the form as provided in Annex 1 to become a Party to this Collaboration Agreement in the case of newly established CoEs entering the Agreement at a later point in time.

CoEs and CASTIEL 2 Consortium Agreement means each respective consortium agreement for each CoE project and the CASTIEL 2 project.

The CoEs’ project and CASTIEL 2 project **Background** means any data, know-how or information – whatever its form or nature (tangible or intangible) including any rights such as IPRs – that:

- (a) Is held by a Party before it acceded to its CoE or CASTIEL 2 Grant Agreement, and
- (b) Is Needed to implement a CoE project and CASTIEL 2 project or exploit a CoE project and CASTIEL 2 project Result, and
- (c) Is identified by a Party in its CoE or CASTIEL 2 Consortium Agreement.

The CoE projects Results and CASTIEL 2 project **Results** shall have the meaning given to *Results* in the REGULATION (EU) 2021/695 OF THE European Parliament and of the Council of 28 April 2021 establishing Horizon Europe – the Framework Programme for Research and Innovation for 2021-2027 - for the CoEs -

AND the Regulation (EU) 2021/694 of the European Parliament and of the Council of 29 April 2021 establishing the Digital Europe Programme, laying down the rules for participation and dissemination in the “Digital Europe Programme (2021–2027)” (hereinafter the “Rules for Participation”) – for CASTIEL 2.

Intellectual Property Rights or IPR means patent, patent applications and other statutory rights in inventions; copyrights (including without limitation copyrights in software); registered design rights, applications for registered design rights, unregistered design rights and other statutory rights in designs; and other similar or equivalent forms of statutory protection, wherever in the world arising or available; but excluding rights in Confidential Information or trade secrets.

National Competence Centres (NCCs) are either single entities or entities (beneficiaries) with affiliated entities implementing 32 national competence Centres in 32 different countries within Euro CC 2 and in Collaboration with CASTIEL 2.

Needed or Need means in respect of the CoEs and CASTIEL 2 projects Results of a Party granting Access Rights that the use by a Party of the respective other project, CoE projects or CASTIEL 2 project (“Party being granted Access Rights”) of such CoE projects and CASTIEL 2 project Results, either:

- (a) to implement its own tasks under its own CoE project and CASTIEL 2 project, or
 - (b) to exploit its own CoE project and CASTIEL 2 project Results generated under its own project,
- (i) is technically essential and where IPRs are concerned, mean that those IPRs would be infringed absent the Access Rights granted under this Collaboration Agreement;
 - (ii) where Confidential Information is concerned, only Confidential Information which has been disclosed in the course of activities under this Collaboration Agreement may be considered as technically essential, except as otherwise agreed between the Party granting Access Rights and the Party being granted Access Rights.

For the avoidance of doubt and in addition, CoE projects and CASTIEL 2 project Results shall be considered as Needed only if Access Rights to such Results had been expressly foreseen in the Grant Agreement of the CoE projects and CASTIEL 2 project of the requesting Party.

Access Rights means, for each CoE project and CASTIEL 2 project, the right to use CoE project and CASTIEL 2 project Results under the terms and conditions laid down in the CoEs’ and CASTIEL 2 Grant Agreement and the respective CoE and CASTIEL 2 Consortium Agreement for the CoE and CASTIEL 2 projects within which the CoE projects and CASTIEL 2 project Results were created, but excluding any right to use any of a Party’s CoE projects and CASTIEL 2 project Background, or any IPR or Confidential Information or trade secrets created by a Party or one of its Affiliates in parallel to and independent of its CoE project and CASTIEL 2 project.

CoE projects and CASTIEL 2 project mean a project funded under the Horizon Europe (the CoEs) or the Digital Europe Programme (CASTIEL 2) and defined as a complementary grant in article 7 in the Grant

Agreement for that project.

Coordinator means the Coordinator of this Collaboration Agreement.

Project Coordinator means the Coordinator of the respective CoE project and CASTIEL 2 project.

CoE and CASTIEL 2 Grant Agreement means, for each CoE project and CASTIEL 2 project, the Grant Agreement that applies to the respective CoE and CASTIEL 2 project.

2. PURPOSE OF THIS AGREEMENT

- 2.1 The Parties have agreed to put in place this Collaboration Agreement to enable Parties to comply with Article 7 and Data Sheet (Point 1) of the Grant Agreement for their CoE project and CASTIEL 2 project.
- 2.2 For the avoidance of doubt, nothing in this Collaboration Agreement shall be construed to prevent all Parties of the particular CoE project and CASTIEL 2 project from agreeing (in the CoE and CASTIEL 2 Consortium Agreement of their CoE project and CASTIEL 2 project) to additional, supplementing Access Rights (including conditions thereof) or confidentiality obligations, provided that such obligations shall apply only to the Parties of that CoE project and CASTIEL 2 project and their participation in that CoE project and CASTIEL 2 project.
- 2.3 For the avoidance of doubt, the terms of each CoE and CASTIEL 2 Grant and Consortium Agreement (and not the terms of this Collaboration Agreement) will govern all terms that apply between Parties to the same CoE project and CASTIEL 2 project. Pertaining to matters within each project concerned (i.e. all internal matters between the parties of an individual project), the relevant Consortium Agreement and Grant Agreement of the concerned project takes precedence. This Collaboration Agreement supplements the existing specific Grant and Consortium Agreements and does not interfere with or in their content or the relationship between the parties involved there.

In the event that a dispute arises between two or more Parties of this Collaboration Agreement which are parties to two or more different CoE and/or CASTIEL 2 Consortium Agreements, the terms of such Consortium Agreements will be compared in order to settle the dispute— within a process leading to a recommendation pursuant to 3.2.3 and 3.3.3. Where possible, the terms of such agreements will be followed, however if there is a conflict between the terms of the respective CoE and/or CASTIEL 2 Consortium Agreements, this Collaboration Agreement will prevail where possible.

3. GOVERNANCE OF THE COLLABORATION

3.1 General Structure

The organisational structure of the collaboration shall comprise the following Collaboration Bodies:

- Centres of Excellence Collaboration Board (CECB) and the
- Competence Centre and CoE Advisory Board (CAB) as the higher-level body for exchange between all, the CoEs, NCCs and the CASTIEL 2 team.

3.2 Centres of Excellence Collaboration Board (CECB)

3.2.1 The Centres of Excellence Collaboration Board (CECB) consists of all Project Coordinators of the CoEs and their deputies and the Coordinator and deputy Coordinator of CASTIEL 2 who can be substituted by the CASTIEL 2 Project Manager(s) in case they are unavailable.

3.2.2 The CECB is chaired and moderated by the Coordinator, in case of absence by the Deputy Coordinator, in case of absence by the Project Manager or Deputy Project Manager of CASTIEL 2.

3.2.3 The role of the CECB is to act as a CoE-centric body to support the CoEs on the overall collaboration initiative, including:

- i) providing a forum to exchange on topics of common interest and to provide feedback to the representatives in the CAB to be transferred to the CAB meetings
- ii) knowledge and information exchange between the CoEs through the CoE representatives of the CAB towards all CoE members in the CECB
- iii) recommendations on the collaboration between the Centres of Excellence and joint events to promote results of the collaboration actions and of the individual CoE results,
- iv) recommendations on conflict resolutions between the involved participants
- v) election of the three CoE representatives to represent the CoEs in the CAB.

3.2.4 The election of the three CoE representatives is organised by the CASTIEL 2 Project Management Team. Each CoE can nominate 1-2 candidates and each CoE can cast two votes.

3.3 Competence Centre and CoE Advisory Board (CAB)

3.3.1 The CAB consists of

- four elected representatives of all the National Competence Centres and
- four elected members of the Centre of Excellences

3.3.2 The CAB is chaired by the Project Coordinator or Project Manager or Deputy Project Manager of CASTIEL 2

3.3.3 The aim of the CAB and its meetings is to give the CoEs, the NCCs and the C5 the floor to discuss the strategy for CASTIEL 2 activities. The representatives of the NCCs and CoEs in this body should be in contact with the other NCCs/CoEs and bring their wishes, suggestions and criticism to the regular meetings. In this way, the needs of the NCCs and CoEs can be better identified and the implementing work package leaders in CASTIEL 2 can take this up immediately and discuss initial, expanded strategies.

Thus, the role of the CAB is to support NCCs and CoEs on the overall collaboration initiative, including:

a) recommendations on the collaboration between the Centres of Excellence, the NCCs and between CoEs and NCCs and joint events to promote results of the collaboration actions and of the individual CoE/NCC results,

b) recommendations on collaboration and synchronization of activities, including but not limited to on management of outcomes, common approaches towards topics like training, industrial interactions (small and medium-sized enterprise involvement), links with regulatory and policy activities, and commonly shared dissemination and awareness raising activities.

c) recommendations on conflict resolutions between the collaboration partners if conflict solution by the CECB has failed.

If deemed necessary, separate non-disclosure agreements will be concluded.

3.4 Representation in meetings

Any Party which is a member of one of the abovementioned Bodies (hereinafter referred to as "Member"):

- should be present or represented at any meeting for which it is nominated;
- may appoint a substitute or a proxy to attend and vote at any meeting for which it is nominated;

and shall participate in a cooperative manner in the meetings

3.5 Preparation and organization of meetings

3.5.1 Convening meetings:

The chairperson of a body shall convene meetings of that body.

	Ordinary meeting	Extraordinary meeting
Competence Centre and CoE Advisory Board (CAB)	Every three months	Upon written request of a member of the CAB
Centres of Excellence Collaboration Board (CECB)	every 6 month	In case of request by aCoE

3.5.2 Notice of a meeting

The chairperson of the abovementioned bodies shall give written notice to each Member of that Consortium Body including an agenda no later than the minimum number of days preceding the meeting as indicated below.

Competence Centre and CoE Advisory Board (CAB)	7 calendar days
Centres of Excellence Collaboration Board (CECB)	10 calendar days

3.5.3 Adding agenda items

Any Member of a body may add an item to the original agenda by written notification to all of the other Members of that body up to the minimum number of days preceding the meeting as indicated below.

Competence Centre and CoE Advisory Board (CAB)	2 calendar days
Centres of Excellence Collaboration Board (CECB)	2 calendar days

3.5.4 During a meeting the Members of a body present or represented can unanimously agree to add a new item to the original agenda.

3.5.5 Meetings will be held via video conferences.

3.5.6 Minutes of meetings

3.5.6.1 The chairperson of a Consortium Body shall produce minutes of each meeting which shall be the formal record of all decisions taken.

3.5.6.2 Meeting minutes are created by the CASTIEL Project Management Team using a collaborative tool and a sanitised version is then published in a shared file repository within 10 calendar days of the meeting.

3.5.6.3 The minutes shall be considered as accepted if, within 30 calendar days from sharing, no Member has sent an objection by written notice to the chairperson with respect to the accuracy

of the draft of the minutes by written notice.

4. IPR and ACCESS RIGHTS

4.1. This Collaboration Agreement deals with the granting of Access Rights by a Party to its CoE project Results and CASTIEL 2 project Results. The Parties of the respective CoEs and CASTIEL 2 projects agree in writing, at their sole discretion, to participate in joint common technical research collaboration, or to otherwise carry out activities which could result in new IPR (whether such IPR can be created solely by a Party, or created jointly with a Party from the CoE projects or the CASTIEL 2 project), such Parties shall enter into a specific (new) agreement, dealing amongst others with ownership and licenses for Results created under such joint technical research collaboration. Such a specific new agreement shall be concluded among the Parties concerned, within six months from the generation of the joint common technical research collaboration, and it shall not deprive the other Parties of the CoE project and CASTIEL 2 project from the rights defined herein.

4.2 General Principles relating to Access Rights to CoE projects Results and CASTIEL 2 project Results

- (i) All Access Rights to CoE project Results and CASTIEL 2 project Results shall be granted by written request on a non-exclusive, non-transferable basis and without the right to grant sub-licenses, in accordance with Article 4.3 unless otherwise agreed upon or expressly mentioned herein and are subject to separate written license agreement to be concluded between the respective Parties;
- (ii) No transfer costs or royalties shall be charged for the granting of Access Rights that are Needed for implementing a Party's tasks under its CoE project and CASTIEL 2 project.
- (iii) Results shall be used only for the purposes for which Access Rights to it have been granted.
- (iv) The granting of Access Rights may be made conditional on the acceptance of specific conditions aimed at ensuring that these rights will be used only for the intended purpose and are subject always to the confidentiality obligations in Article 13 of Grant Agreement and this Collaboration Agreement.
- (v) In any case, the Party asking for Access Rights must demonstrate and substantiate the Need for the Access Rights to the specific CoE project and CASTIEL 2 project Results.
- (vi) Any Party choosing to rely on any deemed grant of Needed Access Rights pursuant to this Collaboration Agreement does so at its own risk as nothing in this Collaboration Agreement prohibits a Party or any other party seeking by whatever means it chooses to enforce its IPRs or contract or other rights if such Party or other party considers such right is not subject to such deemed grant, for example because the exercise of Access Rights is not Needed as the case may be.

The obligation to grant and the right to receive Access Rights to Results Needed under this Collaboration Agreement will remain in force for the term stated in the CoEs' respective and CASTIEL 2 Grant Agreement or the CoEs and CASTIEL 2 Consortium Agreement to which the Party granting or receiving the rights belongs, whichever longer.

In the case of earlier termination as per clause 7.5.2 hereto, a leaving Party shall have Access Rights to CoE project results and CASTIEL 2 project Results developed until the date of the termination of its participation.

In all cases of earlier termination as per clause 7.5.2 hereto the Party whose participation ends shall continue to grant Access Rights pursuant to the respective Consortium Agreement.

4.3 Grants of Access Rights to the CoE projects Results and CASTIEL 2 project Results

- 4.3.1 According to 4.2. (i), each Party agrees to grant Access Rights to its CoE project and CASTIEL 2 project Results to each of the other Parties in the CoE and CASTIEL 2 projects:
- i) on a royalty free basis, during and for the purposes of a CoE project and CASTIEL 2 project, to the extent that the Party being granted Access Rights Needs such Access Rights for implementing its own tasks under its own CoE project and CASTIEL 2 project, and
 - ii) on Fair and Reasonable Conditions in all other cases, to the extent that the Party being granted Access Rights Needs such Access Rights for exploiting its own CoE project and CASTIEL 2 project Results and upon written bilateral agreement.
- 4.3.2 For the avoidance of doubt, no Access Rights are granted between Parties under a CoE project and CASTIEL 2 project Background. .
- 4.3.3 Under complementary beneficiaries prior written request, a Party will, through its respective CoE project and CASTIEL 2 project Coordinator, share with the requesting party , the information from the periodic and/or final technical reports created by it within its CoE project and CASTIEL 2 project, as defined in Article 21.1 and Article 21.2 of the respective Grant Agreement, required to implement the other CoE project and CASTIEL 2 project tasks but subject always to the confidentiality obligations in Article 13 of Grant Agreement and this Collaboration Agreement.
- 4.3.4 Access Rights to Results Needed must follow the conditions stated in the Grant Agreement and the respective Consortium Agreement of the CoE projects and CASTIEL 2 project of the Party granting these Access Rights. In any such case, the prior written consent by the Party/ies owning the Results is obligatory.

4.4 Access Rights to CoE projects and CASTIEL 2 project Results for Affiliates

Each Party shall ensure of their own Affiliate(s) as identified in the respective CoE project Consortium Agreements that receives Access Rights under this Collaboration Agreement that such Affiliate(s) shall fulfill all confidentiality obligations towards the other Parties as if such Affiliate was a Party to the Collaboration Agreement. Access Rights granted to any such Affiliate are subject to the continuation of the Access Rights of the Party of which it is an Affiliate, and shall automatically terminate upon termination of the Access Rights granted to such Party. Further, if an Affiliate fails in any material respect to comply with the undertaking given by it as above, and fails to rectify the non-compliance after being given a reasonable opportunity to do so, all Access Rights granted to it based upon that undertaking shall terminate. The Party of such an Affiliate which has been granted access to CoE project and CASTIEL 2 project Results shall remain responsible for the actions of such Affiliate, including any breach of confidentiality obligations by its Affiliate.

Upon cessation of the status as an Affiliate, any Access Rights granted to such former Affiliate shall lapse.

4.5 Inability to Grant Access Rights due to Third Parties' Rights

When a Party is unable to grant Access Rights under clause 4.2 - 4.4 upon another parties request, or when the granting of such Access Rights is subject to any limitations or any restrictions which

might substantially affect the terms and conditions of the granting of such Access Rights, it will promptly notify such other Party. If possible, it will also promptly inform such other Party of the duration of the restriction.

4.6 Confidentiality

4.6.1 Period of Confidentiality

For any Confidential Information, the period of confidentiality shall be the duration of this Collaboration Agreement and four (4) years from its expiration or termination of the last CoE project and CASTIEL 2 project but in no case longer than 5 years from the date of disclosure. ("Confidentiality Period").

4.6.2 Confidentiality Obligations

Each Party undertakes that:

- it will not during the Confidentiality Period use such Confidential Information of another Party for any purpose other than for the Purpose of this agreement, in accordance with section 2, for which it was disclosed and solely in accordance with the terms of the Collaboration Agreement; and
- it will during the Confidentiality Period use the same standard of care to protect the Confidential Information as it does with confidential information of its own (and not less than reasonable care) and not disclose the same to any other third party without the prior written consent of such owner in each case. Third party as stated in the foregoing sentence does not include, and does not prevent disclosure to Affiliates in accordance with clause 4.4 above; and
- it will during the Confidentiality Period only communicate Confidential Information on a need to know basis to another Party or an Affiliate (on terms as stated above); and
- it will, during the term of the Collaboration Agreement, when communicating with any Party or an Affiliate, strictly comply with any procedures for marking and handling of documents as decided by the disclosing Party, and
- it will return to the disclosing Party, or destroy, on written request (email with acknowledgment of receipt being sufficient) all Confidential Information that has been disclosed to the recipients including all copies thereof and to delete all information stored in a machine-readable form to the extent practically possible. The recipients may keep a copy to the extent it is required to keep, archive or store such Confidential Information because of compliance with applicable laws and regulations or for the proof of on-going obligations provided that the recipient comply with the confidentiality obligations herein contained with respect to such copy for as long as the copy is retained.

The above shall not apply for disclosure or use of Confidential Information, if and in so far as the recipient can show that:

- a) the disclosing Party agrees to release the other Party;
- b) the information was already known by the recipient or is given to it by a third party that was to the best knowledge of the recipient, without any obligation to discover the status of the information, in lawful possession thereof and not bound by any obligation of confidentiality;
- c) the recipient proves that the information was developed without the use of confidential information;

- d) the information becomes generally and publicly available, without breaching any confidentiality obligation, or
- e) the disclosure of the information is required or requested by applicable rules, laws or regulations or with a court or administrative order or proceeding ("Law") , provided that if any Party becomes aware that it will be required, or is likely to be required, to disclose Confidential Information in order to comply with the Law, it shall, to the extent it is lawfully able to do so, prior to any such disclosure
 - a. notify the disclosing Party, and
 - b. comply with the disclosing Party's reasonable instructions to protect the confidentiality of the information.

Notwithstanding anything to the contrary, nothing in this clause 4.6 shall be understood to grant or constitute any direct or implied license to any copyright, patent, intellectual property or similar rights and each Party (and its Affiliates) shall retain the right to enforce its and their copyright, patents, intellectual property or similar rights against any other Party in relation to the use, distribution or marketing of any hardware, software products or service.

Nothing in this Agreement shall prohibit or restrict any Party's right to develop, make, use, market, license or distribute technology or services similar to or competitive with those disclosed in any Confidential Information of another Party as long as it does thereby not breach this Agreement. Each Party acknowledges that the other Parties may already possess or have developed technology or services similar to or competitive with those disclosed in the confidential Information of a Party.

4.6.3 Communication of information

For the avoidance of doubt, it is stated that the confidentiality obligations under this Collaboration Agreement shall not be interpreted as to prevent the communication of Confidential Information subject to clause 4.4, to any Affiliate already involved in the relevant CoEs projects insofar as strictly needed for the proper implementation of this Collaboration Agreement or the respective CoE and CASTIEL 2 Grant Agreement.

4.7 Dissemination

4.7.1 Dissemination of results of one CoE

The dissemination of results follows the CA of the CoE where they were achieved.

4.7.2 Dissemination of the results of CoE or CoE/Castiel 2 collaboration.

A Party shall not include in any dissemination activity another Party's Results or joint results without obtaining the owning or co-owning Party's prior written approval, unless they are already published.

5. LIABILITY

5.1 No Warranties

In respect of any information, data, document or other materials in any form, whether confidential or not (including CoE project Results and CASTIEL 2 project Results supplied by any Party to a Party in another CoE project and CASTIEL 2 project under this Collaboration Agreement, no warranty or representation of any kind is made, given or implied as to the sufficiency or fitness for purpose nor as to the absence of any infringement of any proprietary rights of third parties.

Therefore,

- the recipient Party shall in all cases be entirely and solely liable for the use to which it puts such information, data, document or other materials in any form, and

- no Party granting Access Rights shall be liable vis-à-vis any of the other Parties in case of infringement of proprietary rights of a third party resulting from any other Party (or its Affiliates) exercising its Access Rights.

5.2 Limitations of Liability

5.2.1 General liability

Subject to the following provisions of this clause 5.2, the general provisions of Belgian law governing liability shall apply to any claim between the Parties for loss or damage caused by a Party, its Affiliates, its employees, its agents and its Subcontractors and arising in connection with this Collaboration Agreement.

5.2.2 Excluded Liabilities

To the extent permissible under applicable Belgian law, in no event shall any Party be liable to another Party for loss or damage caused by a Party, its Affiliates, its employees, its agents and its Subcontractors in connection with this Collaboration Agreement for any of the following, however caused or arising, on any theory of liability, and even if  such Party was informed or aware of the possibility thereof:

- loss of profits, revenue, income, interest, savings, production and business opportunities;
- lost contracts, goodwill, and anticipated savings;
- loss of or damage to reputation;
- costs of recall of products; or
- any type of indirect, incidental, punitive, special or consequential loss or damage.

5.2.3 Financial Limit on Liability

Option 1: Liability Levels

Any liability under this Collaboration Agreement shall not affect liability within a CoE /CASTIEL 2 Project.

However, if there are financial limitation to the CoE project Consortium Agreements or the CASTIEL 2 project Consortium Agreement, they shall be applicable, so that in the context of a collaboration between CoE /Castiel 2 parties, a party shall not be liable for a higher amount than it would be liable for under its CoE / CASTIEL 2 project.

In case a Party participates with more than one project under this Cola and the liability extends to more than one project, the highest specified liability cap amongst the affected projects for which the Party is liable shall apply.

Option 3: 200.000 Euro liability cap

Any liability under this Collaboration Agreement shall not affect liability within the CoE /CASTIEL 2 Project and any financial limitations therein shall not be applicable. The financial limit for liability for actions under this collaboration agreement is 200.000 Euro; provided such damage was not caused by a willful act.

5.2.4 Exceptions

A Party's liability shall not be limited under the exclusions and limitations stated in Sections 5.2.2 and 5.2.3 to the extent such damage was caused by a wilful act or to the extent that such limitation is not permitted by law 

6. GOVERNING LAW AND DISPUTES

6.1 This Agreement shall be construed according to and governed by the laws of Belgium, excluding its conflict of law provisions.

6.2 The Parties shall endeavour to settle their disputes amicably.

6.3 All disputes arising out of or in connection with this Collaboration Agreement, which cannot be solved amicably, shall be finally settled by the courts of Brussels, except if ECMWF is involved (directly or indirectly).

Nothing in this Collaboration Agreement shall limit the Parties' right to seek injunctive relief in any applicable competent court (except if ECMWF is involved (directly or indirectly)).

6.4 If ECMWF is involved (directly or indirectly), all disputes shall be finally settled under the Rules of Arbitration of the International Chamber of Commerce by one or more arbitrators appointed in accordance with the said Rules.

The proceedings shall be in the English language. The place of arbitration shall be Brussels if not otherwise agreed by the conflicting Parties.

The award of the arbitration will be final and binding upon the Parties.

Nothing in this Consortium Agreement shall be deemed a waiver, explicit or implicit, of the privileges and immunities awarded to ECMWF, an inter-governmental organization, as per its Convention and Protocol by its Member States.

6.4 When acting under this Collaboration Agreement, each Party will comply with all relevant laws and regulations applicable to its performance hereunder, including (without limitation) export laws and regulations of the European Union and of other relevant States.

In case the implementation of this Agreement is subject to export control authorisation, the Parties shall reasonably assist each other in obtaining all necessary export licences/authorisations and in preparing, signing and submitting for approval the related documentation to the competent authorities and in carrying out all necessary formalities to that end.

7 MISCELLANEOUS

7.1 No Representation, Partnership or Agency

No Party shall be entitled to act or to make legally binding declarations on behalf of any other Party or of the Collaboration Agreement. Nothing in this Collaboration Agreement shall be deemed to constitute a joint venture, agency, partnership, interest grouping or any other kind of formal business grouping or entity between the Parties.

7.2 No Implied License

Except as explicitly granted in this Collaboration Agreement, no license, immunity, or other right is granted or assigned under this Collaboration Agreement, either directly or indirectly, by implication, estoppel or otherwise, to any Party or any of its Affiliates with respect to any IPR of the other Parties or their Affiliates.

7.3 Enforcement of Intellectual Property Rights

No Party shall have any obligation under this Collaboration Agreement to institute any action or suit against any third party for infringement of any IPR to which it has granted a license hereunder, or to defend any action or suit brought by any third party which challenges or concerns the validity of any such IPR. In addition, no Party to which any other Party has granted an IPR license under this Collaboration Agreement shall have any right to institute any action or suit against third parties for infringement of any such IPR.

7.4 Assignment and Amendments

Amendments and modifications to the text of this Collaboration Agreement require a separate written agreement to be signed between all Parties.

Except as otherwise provided under this Collaboration Agreement, no Party shall, without the prior written consent of the other Parties, assign or otherwise transfer partially or totally any of its rights and obligations under this Collaboration Agreement. Such consent shall not be unreasonably conditioned, withheld or delayed when such assignment or transfer is in favor of another Party or an Affiliate of the assigning Party or one of the other Parties. Such consent shall be deemed granted where a Party has obtained the agreement of the Parties to its own CoE project and CASTIEL 2 project to such an assignment, and (if required) consent of the European Commission.

7.5 Term and Termination

7.5.1 Term

This Collaboration Agreement shall come into force for each Party as from that Party's Accession Date.

Participation of CoE projects in this Collaboration Agreement end with the end date of the CoE. The respective Project Coordinator has to inform the Coordinator of the end of a CoE project. At this point in time, ongoing collaborative projects must be finalized within one year of the end of the completed project. During this time, the respective Project Coordinator remains part of the ECBC (and respectively in the CAB) and the terms and conditions of this Collaboration Agreement shall apply accordingly.

This Collaboration Agreement shall continue in full force and effect until terminated in accordance with this clause 7.5 or until one year after the expiration of the last CoE project and CASTIEL 2 project, whichever is the first event to occur.

7.5.2 Withdrawal

After the signature of this Collaboration Agreement, no Party shall be entitled to voluntarily withdraw from this Collaboration Agreement, except as set forth below.

In the event that (i) a Party withdraws from the Grant Agreements of the CoE project or the CASTIEL 2 project in which said Party has participated, as well as all of the corresponding CoE and CASTIEL 2 Consortium Agreements or (ii) such Party's participation to the Grant Agreement of the CoE project and the CASTIEL 2 project as well as all of the corresponding CoE and CASTIEL 2 Consortium Agreements is terminated early, each in accordance with the applicable terms of the relevant CoE and CASTIEL 2 Consortium Agreements and Grant Agreements, then the Party concerned may withdraw from this Collaboration Agreement by written notice to the relevant Project Coordinator(s) and the Coordinator.

7.5.3 General Provisions Relating to Termination or Withdrawal

- i. Clauses 4, 5 and 6 of this Collaboration Agreement shall survive any expiration or termination or withdrawal to the extent needed to enable the Parties to pursue the remedies and benefits provided for in this Collaboration Agreement.
- ii. Save in a case due to force majeure, in the event of a material breach by a Party (the "Defaulting Party") of its obligations under this Collaboration Agreement (i) which is irremediable or (ii) which is not remedied within one (1) month of the date of receipt of written Notice of Default from the Coordinator of this Collaboration Agreement, such notice requiring that the default be remedied, then the Coordinator of this Collaboration Agreement may terminate this Collaboration Agreement with respect to the Defaulting Party concerned by written Notice of Termination. Without prejudice to the provisions of clause 4.6 and clause 5, such termination shall become effective with respect to such Defaulting Party as of the date of receipt of such notice.
- iii. For the avoidance of doubt, termination or withdrawal shall not affect any rights or obligations incurred under this Collaboration Agreement in respect of that part of the withdrawing/terminated Party's activities under this Collaboration Agreement which has been carried out (or which should have been carried out) prior to the date of the termination or withdrawal unless otherwise agreed in this Collaboration Agreement. However, the Access Rights granted to a Defaulting Party and such Party's right to request Access Rights shall cease immediately upon termination or withdrawal in respect of such Defaulting Party.

7.5.4 Notices

Any notice to be given under this Collaboration Agreement shall be in writing to the addresses of the relevant Project Coordinator and the Coordinator.

7.5.5 Accession

All Parties of the CoEs Projects shall accede to this Collaboration Agreement by either

- a) signing this Collaboration Agreement or
- b) giving the Project Coordinator the power of attorney (Annex X) to sign the Collaboration Agreement on their behalf

The Parties to a new CoE projects shall accede to the Collaboration Agreement by either

- a) signing the accession form (Annex X) or
- b) giving the Project Coordinator the power of attorney to sign the accession form (Annex 1) on their behalf.

Annex 1: Declaration of Accession for new CoE projects

Annex 2: List of Project Coordinators in the current version (to be updated when new CoEs join as linked actions)

Annex 3: Internal Regulations of the CoEs / CASTIEL 2 Collaboration

Annex 4: Power of Attorney

Annex 5: List of the parties of the respective CoEs and Castiel 2 (status at the time of contract conclusion)

Annex 6: Lists of entities under the same control, provided by the CoE /Castiel 2 Project Coordinators (status at the time of contract conclusion)

SIGNATURES

1) CASTIEL 2

Project Coordinator (Legal Entity) is authorized to sign for:

3.2 Party A

3.3 Party B

3.4 Party C

Date:

Signature:

Name and title of the person who is legally authorised to act on behalf of the legal entity

Parties not authorizing the project coordinator:

Name of Party 1

Date:

Signature:

Name and title of signing person

Name of Party 2

Date:

Signature:

Name and title of signing person

ANNEX 1 – DECLARATION OF ACCESSION

☐ Option 1 – via PoA

Accession of a new Centre of Excellence Project to the EuroHPC JU Centres of Excellence (CoEs) and CASTIEL 2 Collaboration Agreement

Name of the Project:

Project Coordinator:

Names of the Parties:

[Name of Party (legal entity) being the Coordinator of the respective CoE], represented for the purpose hereof by **[name and title of person written out in full (person legally authorised to act on behalf of the legal entity)]** acting as its legal authorised representative and duly authorised by the abovementioned project Parties to declare the accession to this Collaboration Agreement, hereby consents on behalf of and in the power of attorney of the abovementioned parties to become a Party to the Collaboration Agreement and accepts all the rights and obligations of a Party as set out therein.

Date:

Signature(s)

Name(s)

Title(s)

☐ Option 2 – via direct signature of the party/parties

Accession of a new Party to the EuroHPC JU Centres of Excellence (CoEs) and CASTIEL 2 Collaboration Agreement

[OFFICIAL NAME OF THE NEW PARTY AS IDENTIFIED IN THE Grant Agreement]. Party to the CoE **[NAME OF THE CoE]** hereby consents to become a Party to the Collaboration Agreement identified above and accepts all the rights and obligations of a Party starting **[date]**.

This Accession document has been prepared in 2 originals to be duly signed by the undersigned authorised representatives.

ANNEX 2 – LIST OF PROJECT COORDINATORS

Acronym	Role	Country	Business Name	Legal Name
CASTIEL 2	Coordinator	DE	USTUTT	UNIVERSITAET STUTTGART
EXCEL- LERAT P2	Coordinator	DE	USTUTT	UNIVERSITAET STUTTGART
HiDALGO 2	Coordinator	PL	PSNC	INSTYTUT CHEMII BIOORGANICZNEJ POLSKIEJ AKADEMII NAUK
ESiWACE3	Coordinator	ES	BSC	BARCELONA SUPERCOMPUTING CENTER-CENTRO NACIONAL DE SU- PERCOMPUTACIÓN
BioExcel-3	Coordinator	SE	KTH	KTH Royal Institute of Technology
MaX	Coordinator	IT	CNR	CONSIGLIO NAZIONALE DELLE RI- CERCHE
SPACE	Coordinator	IT	UniTo	University of Turin
CEEC	Coordinator	SE	KTH	KTH Royal Institute of Technology
MultiXscale	Coordinator	SI	NIC	KEMIJSKI INSTITUT
ChEESE-2P	Coordinator	ES	CSIC	AGENCIA ESTATAL CONSEJO SUPE- RIOR DE INVESTIGACIONES CIENTI- FICAS, M.P.
Plasma- PEPSC	Coordinator	SE	KTH	KTH Royal Institute of Technology
POP3	Coordinator	ES	BSC CNS	BARCELONA SUPERCOMPUTING CENTER-CENTRO NACIONAL DE SU- PERCOMPUTACIÓN
EoCoE-III	Coordinator	FR	CEA	COMMISSARIAT A L'ENERGIE ATO- MIQUE ET AUX ENERGIES ALTERNA- TIVES

ANNEX 3:

INTERNAL REGULATIONS OF THE COES / CASTIEL 2 COLLABORATION

Following the requirement put forward within the Grant Agreements of each project listed in the Preamble to this document, we specify the forms of collaboration and data exchange between the following linked actions:

- *Coordination and Support for National Competence Centres and Centres of Excellence on a European Level, CASTIEL 2 (CSA), 101102047, funded by EuroHPC*
- *European Centre of Excellence for Engineering Applications on HPC and associated technologies, EXCELLERAT P2, 101092621, funded by EuroHPC*
- *Centre of Excellence for weather and climate phase 3, ESIWACE3, 101093054, funded by EUROHPC*
- *BioExcel Centre of Excellence for Computational Biomolecular Research, BioExcel-3, 101093290, funded by EuroHPC*
- *Materials design at the exascale, MaX, 101093374, funded by EuroHPC*
- *HPC and Big Data Technologies for Global Challenges, HiDALGO2, 101093457, funded by EuroHPC*
- *Scalable Parallel and distributed Astrophysical Codes for Exascale, SPACE, 101093441, funded by EuroHPC*
- *Centre of Excellence for Exascale CFD, CEEC, 101093393, funded by EuroHPC*
- *Centre of Excellence in exascale-oriented application co-design and delivery for multiscale simulations, MultiXscale, 101093169, funded by EuroHPC*
- *Centre of Excellence for Exascale in Solid Earth - Second Phase, ChEESE-2P, 101093038, funded by EuroHPC*
- *Plasma Exascale-Performance Simulations CoE - Pushing flagship plasma simulations codes to tackle exascale enabled Grand Challenges via performance optimisation and codesign, Plasma-PEPSC, 101093261, funded by EuroHPC*
- *Performance Optimisation and Productivity 3 CoE, POP3, established under Call HORIZON-EUROHPC-JU-2023-COE-01, predicted start date 01.01.2024*
- *Energy-oriented Centre of Excellence, EoCoE-III, established under Call HORIZON-EUROHPC-JU-2023-COE-01, predicted start date 01.01.2024.*

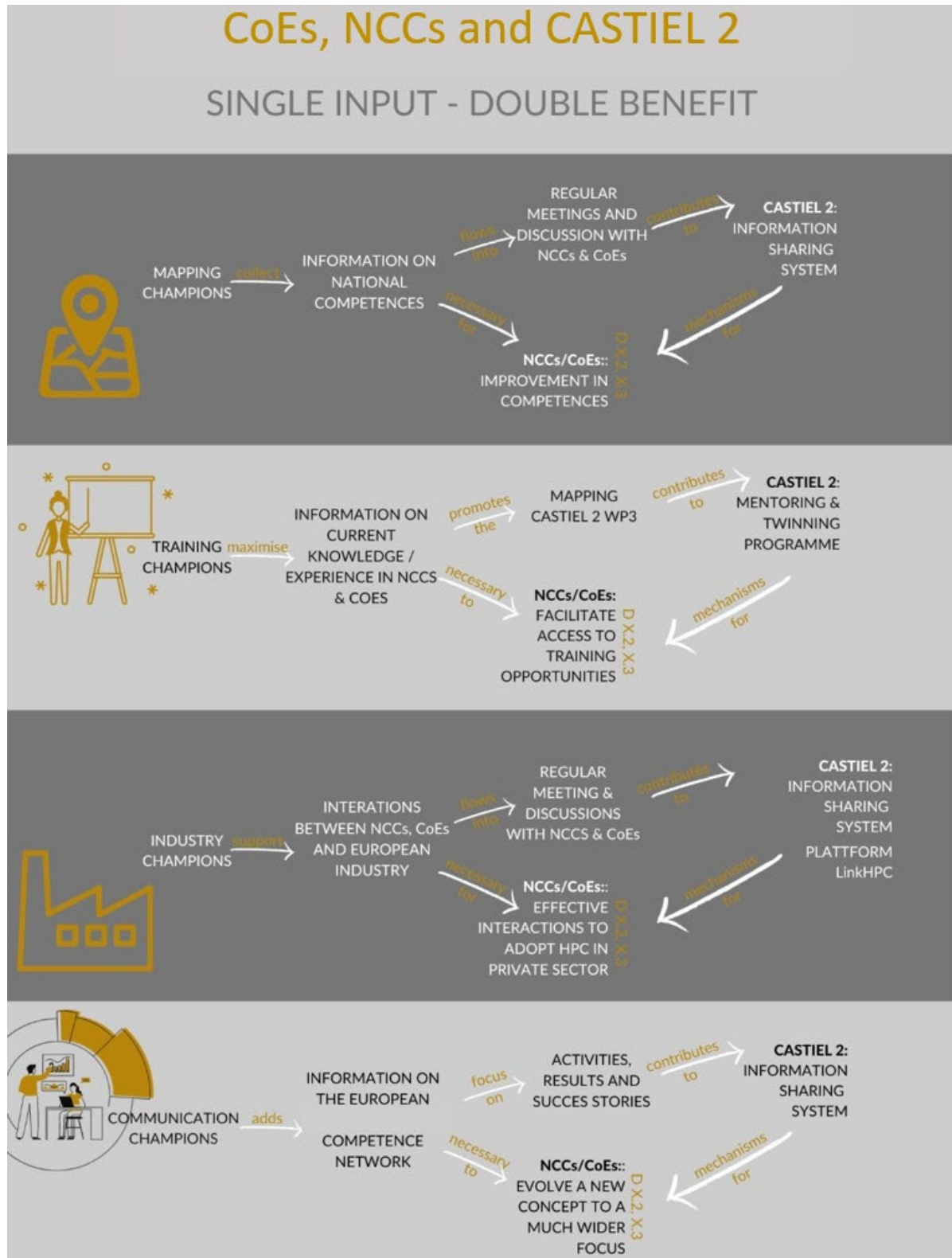
1. Introduction - The role of CASTIEL 2 (CSA)

The mission of CASTIEL 2 encompasses the harmonization and reinforcement of endeavours undertaken by the National Competence Centre (NCC) and Centre of Excellence (CoE) initiatives on a pan-European scale. Its primary objective is to facilitate collaborations among NCCs and CoEs, as well as within their respective communities, to maximize their influence on European High-Performance Computing (HPC) landscape and user base.

CASTIEL 2 will play a pivotal role in consolidating the collective influence of CoEs and NCCs by nurturing networks, promoting interaction, and identifying areas of synergy (see flowchart below). It will address disparities in HPC expertise and experience among different countries, contributing to the sustainable growth and advancement of NCC and CoE activities. Additionally, through an enhanced EuroCC Access portal, CASTIEL 2 will establish a central hub that serves as a comprehensive reference point for all parties interested in European HPC expertise, software codes, training resources, events, and services.

The evolved EuroCC Access portal will not only accommodate offerings from other European HPC initiatives funded by the European Commission or EuroHPC Joint Undertaking, but also extend its accessibility to all stakeholders who can derive value from or contribute to it. The principal objective of CASTIEL 2 thus is to facilitate and orchestrate the elevation of competency standards in the provision

of High-Performance Computing (HPC) and its related technologies to academia, public administration, and industry. CASTIEL 2 establishes a robust framework and assumes the role of a reference entity for Centres of Excellence (CoEs) and the NCCs, fostering their collaboration, knowledge exchange, and dissemination of best practices. By uniting the efforts of CoEs and NCCs, CASTIEL 2 endeavours to fortify the European HPC landscape and furnish optimal support to the user groups relying on these critical technologies.



2. Planned collaboration between the CoEs and with CASTIEL 2

The CoEs will be invited to collaborate within all activities foreseen in the technical work packages of CASTIEL 2, spanning WP2 “*NCC/CoE Networking and Mapping of Competences, Codes and Services*”, WP 3 “*Training, Twinning, Mentoring*”, WP 4 “*NCCs, CoEs and Industry Interactions*” and WP 5 “*Awareness, Impact and Outreach*”. The CoEs will also collaborate among each other, which will be facilitated and boosted by CASTIEL 2. The involvement of the CoEs within CASTIEL 2 encompasses the following areas:

1. The participation of the CoEs’ representatives in the *Competence Centre and CoEs Advisory Board* (CAB) of CASTIEL 2 (next to the NCCs’ representatives).
2. The participation of the CoEs’ representatives in the topical Working Groups and Task Forces of CASTIEL 2.
3. Joint events, such as workshops and seminars, both online and F2F.

With respect to the CAB, four members and three deputies from the CoEs will be elected to participate in the Board. Two members and one Deputy from the CoE Call Topic 1 (Development of exascale-ready applications) and two members and two deputies from Call Topic 2 (Supporting supercomputing applications for Science & Innovation). On the NCC side, there will also be 4 members to the CAB (and 4 deputies).

Within **CASTIEL 2 WP 2** the collaboration will follow along the lines of the already initiated activities, such as the joint work on the summary document about the CoEs, that collects general information on each CoE (e.g. partners, objectives, codes, use cases) and also the email and name of the champions for every WP of CASTIEL 2. During the project runtime, Task Forces will be set up to focus on special topics of interest of the CoEs (and the NCCs), such as the one already established on *Artificial Intelligence*. Every CoE is invited to participate in these Task Forces and contribute their expertise. Additionally, the WP2 and WP4 Champions or relevant experts from the CoEs will be given the chance to be a speaker for the *Code of the Month* events. WP 2 will also collect requirements from CoEs and academic/ government end-users on the competence map, codes & libraries, and services for the C2ISS and define the information structure and capabilities required. Being aware of these requirements will ensure that the extension of the competence map to the CoEs is coherent with the competence and skill portfolio of all involved parties – the CoEs (and NCCs).

Within **CASTIEL 2 WP 3** the CoE Training champions and their deputies are invited to attend the monthly Training Coffee breaks to interact with the NCC Training champions/deputies. The CoEs are also invited to organise joint training courses with the NCCs. A continuous task is the promotion of the CoE training events in the training registry (*HPC in Europe* portal). WP 3 has also set up a Task Force on NCCs-CoEs training-related collaborations and exchange of materials, and invites volunteers from all CoEs to participate in these meetings. Planned within the project runtime are further meetings with the Training champions/ deputies from CoEs to collect their needs and wishes to enable well-targeted support.

Within **CASTIEL 2 WP 4** the CoE Industry champions and their deputies will be invited to attend the virtual Industry Coffee breaks to interact with the NCC Industry champions/deputies. CASTIEL 2 WP 4 will produce a summary document (by end of Summer 2023, latest September 2023) about the CoEs with regards to the industry topics specifically, that collects general info on each CoE with respect to industry topics (e.g. objectives, needs, challenges, resources, etc), which will also include the email and name of the industry champions. As a continuous task, WP 4 will organize every three months WP4-CoEs meetings with the industry representatives of the CoEs to share updated news/requests/knowledge or material. The CoEs will be also invited to join events organized by CASTIEL2-WP4 for the NCCs and the CoEs to enhance knowledge sharing and exchange between NCCs and CoEs with

regards to the industry topics. WP 4 will also collect the specific features or requirements from the CoEs with regards to their existing services portal in order to jointly find out how to link the CoEs services portal and either the future central hub or the “LinkHPC platform” (old name “marketplace”), that will be articulated with the C2ISS or directly to the C2ISS. Regarding collaborations among the CoEs, CASTIEL 2 WP 4 will organize thematic webinars for several CoEs to interact on crossed topics or methods that they have in common. The CoEs will also be invited to participate to industry sectorial events, for which the first selection will be done with the NCCs.

CASTIEL 2 WP 5 will execute the communication strategy to form the National Competence Centre (NCC) and Centres of Excellence (CoE) brands, including highlighting the activities, outcomes, and success stories of each individual CoE (and NCC), thereby providing opportunities for them to showcase their endeavours and facilitate tailored communication efforts within the NCC community. This also includes the evolution of the EuroCC Access portal, expanding its scope beyond NCCs to encompass a broader spectrum of entities, including CoEs and other European counterparts. This expansion will be facilitated by the introduction of the C2ISS (CASTIEL 2 Information Sharing System). Furthermore, the WP will provide extensive support to both NCCs and CoEs to assist with their own communication, may that be in the form of material provided, joint efforts, or else. Also, in WP5, the work to coordinate a common continuous integration (CI) with the CoEs is located, which will result in the codes being available on all EuroHPC JU Systems.

4. Contributions from the CoEs to CASTIEL 2

In order for the workflows within the CASTIEL 2 work packages to be effective and provide optimal support to the CoEs, the following inputs are planned to be collected from the CoEs (important note: as the collaboration evolves, more points might be added to this list, so it is not exhaustive at the moment.). The CoEs will at least contribute to the activities that are also anchored in their grant agreements in accordance to their respective allocated effort."

Legacy Code Deliverables: For the legacy code deliverable (M12, M24 and M36) the CoEs will be asked for updates of their codes/use cases. The first request for the deliverable at M12 will be about access to their codes / licensing policies + other relevant details (description, portability & plans for porting, scalability, number of users etc).

 **WP1/Management deliverables of CASTIEL 2:** Where input from the CoEs (and NCCs) is required in order to complete the CASTIEL 2 WP1 Deliverables, the CoEs will be informed ahead of time what type of data and how will be collected (e.g. KPIs).

Competence & Service Mapping: In Y2, the CoEs will be involved in the extension of the competence mapping (so far showcasing the NCCs and now to be extended to encompass the CoEs' competences and services) according to the CASTIEL2-DoA.

C2ISS: In order to implement a unified website/portal system, a common *information sharing system* (C2ISS) will be created, which will integrate existing databases while also introducing new ones to accommodate additional functionalities. WP 5 will work closely with the CoE representatives to collect their feedback on the C2ISS. Once the prototype of the C2ISS platform will be ready, the NCCs' and CoEs' feedback on its usability, possibility of improvements, additional features will be invited – from the competences, services and also training activities point of view.

Speakers for workshops: During the project runtime CASTIEL WP 2 and WP 3 will invite volunteers from the CoEs to be internal speakers for workshops / webinars on dedicated topics.

Training Coffee Breaks: WP 3 will invite all CoEs to introduce their CoE to the NCCs at the monthly Training Coffee Breaks.

Mentors for Mentoring & Twinning: A further WP 3 activity is to involve CoEs as mentors in the mentoring and twinning programme, namely in the mentoring workshops, summers schools and in the mobility.

Joint trainings activities: A continuous task is the engagement in joint training-related collaborations and activities with NCCs via WP 3. Furthermore, it is planned to include the CoEs in the training of the state-of-the-art software development concepts to ensure sustainable, high-quality, reliable and reusable codes.

Industry interaction: Information that WP 4 will collect (for some points on a regular basis) includes: Contact Information for various areas of activity and for interaction with the NCCs within industrial topics, essential public descriptions of the CoE projects, information about communication & dissemination KPIs/targets, industrial outreach KPIs/targets/objectives, applications and maybe support offers of relevance to the NCCs (or others). The CoEs will also be invited to contribute figures regarding industry interaction, i.e. for WP 4, these are two tables (one collecting data for SMEs, and one for Big Industry) on a quarterly basis. This would enable CASTIEL 2 (especially WP 4) to monitor the CoEs interactions with industry stakeholders.

LinkedHPC platform: Regarding the future “*LinkedHPC*” platform (former name *Marketplace*) & future central hub/C2SSI, it is planned to collect the CoEs’ needs/expectations/opinions & what the CoEs are planning for their own services portal, as well as the CoEs’ expectations and wishes on CASTIEL 2 WP 4 should provide the CoEs with: the specifications to follow to be able to link their own portals with the Hub/C2SSI

Success stories & use cases: CASTIEL 2 will collect success stories & use cases from the CoEs (and NCCs) to promote them and also to provide booklets/webpages/slides easily used by the NCCs/CoEs to interact with their potential prospects

Communication & Dissemination: In order to provide enhanced value and specialized services to the Centres of Excellence in terms of outreach, communication, and dissemination, their needs and wishes will be regularly captured through invited meetings, small surveys or other types of data collection by WP 5.

The results of all these actions will be included in CASTIEL 2 deliverables. In case the deliverables are not *sensitive* and meant for the consortia and the EC/JU only but are of a **public** nature, the CoEs (and NCCs) will have access to the final draft before submission, to double-check their contributions and their representation in the document.

5. **Joint Events facilitated by CASTIEL 2**

In order for the workflows within the CASTIEL 2 work packages to be effective and provide optimal support to the CoEs, the following joint events are planned (important note: as the collaboration evolves, more points might be added to this list, so it is not exhaustive at the moment.). The CoEs will at least contribute to the activities that are also anchored in their grant agreements in accordance to their respective allocated effort.

- **Training Champions Meetings & Workshops:** The CoE representatives will be invited to take part in “training champions meetings and workshops”
- **Industry Code of the Month** (in collaboration with WP 2): with an iteration each month (ideally), for the CoEs to present their services available for industry, and their potential collaboration with industry. Two versions of this event are planned: “Industry CotM” (internal event for the NCC/CoE network with focus on industry champions), and a public version “code of the month”.
- **Workshop series for code & service promotion:** A potential Workshops or webinars series jointly with CoEs and NCCs to promote the codes and services of them to industry stakeholders
- **Industry sector Events:** Common attendance to industry sectorial events to promote the NCCs/CoEs services offerings in specific industry sectors

- **Thematic webinars:** to promote some codes/applications of several CoEs in similar fields or in complementary fields/techniques
- **WP 4-CoE Meeting:** Every three months, WP 4 will organize a WP4-CoEs meeting with the industry representatives of the CoEs to share updated news/requests/knowledge or material.
- **Industry Coffee Breaks:** to enable topic-centred exchanges among the industry specialists
- **Communication Coffee Breaks:** to enable topic-centred exchanges among the communication specialists
- **Communication Champion Meetings:** Small Group Meetings with the CoE Communication Champions to form collaborations and exchange on current topics of interest.
- **Joint (online or F2F) workshops** with the NCCs: during the project runtime CASTIEL 2 might organize general workshops/conferences spanning all topics of interest to bring together the domain experts from the CoEs with the network of the National Competence Centres.

6. Exchanged data & documents

6.1 from the CoEs to CASTIEL 2

- **Minutes and slides:** of the Working Group and Task Force Meetings within CASTIEL 2 with CoE participation
- **CAB Meetings:** Invitations, minutes and any further material from the Competence Centres and CoEs Advisory Board (CAB) or CAB-CASTIEL 2 C5 Meetings (C5 = the WPL meeting of CASTIEL 2).
- **Information flow from CASTIEL 2 WPs or NCCs:** Information coming from other CASTIEL2 WPs or other NCCs or CoEs about events organised by them will be shared with the CoEs
- **Requests for participation:** Invitation to participate in the organization of events, coming from other CoEs/NCCs.
- **Competence & Services Map:** Information related to the Competence & Services Map/inputs for the map will be shared between CASTIEL 2 and the CoEs.
- **Training activities:** Initial involvement in WP 3 will span sharing of training-related goals and budget / resources from DoA. A continuous task of WP 3 will be to share training-related best practice guides, available training-related resources and training materials/documents
- **HPC in Europe Portal:** Information about the CoEs training events, ideally shared in the training registry (HPC in Europe portal)
- **Deliverables:** For all CASTIEL 2 deliverables, where input of the CoEs is needed according to the DoA, such input will be requested from the CoEs Champions/their deputies. For instance, for the WP 3 deliverables, information will be needed on joint training-related collaborations with NCCs, on exchange of training-related information and materials/documents with NCCs.
- **Access to DoAs:** Access to the CoEs DoAs, apart from information falling under a strict confidentiality clause, will be given to CASTIEL 2 in order to be able to conduct the necessary support and coordination work (esp. Goals, objectives, KPIs) and to facilitate the planning of the next CASTIEL 2 activities. The CoEs will also receive access to the CASTIEL 2 DoA. This is valid for all signing CoEs and its members besides the CEEC CoE, which is not agreeing to share the DoA.
- **Industry interaction:** Data on industry interaction (SMEs and Large industry) of the CoEs will be collected (if not confidential) in order to plan suitable activities for the CoEs and fulfil the reporting requirements on the CASTIEL 2 side (i.e. deliverables and reports required by the Grant Agreement/the DoA).
- **Communication:** Exchange of expertise and resources with regard to communication work

6.2 From CASTIEL 2 to the CoEs

The CoEs have or will have access to the following documents and information:

- **Deliverables:** the CoEs will have access to all public and sensitive CASTIEL 2 deliverables, in cases where the sensitive deliverables contain information provided by the CoEs.
- **General information about the NCCs:** such as email, name and address of the NCCs champions in every CASTIEL 2 WP, to allow alignment on joint topic of interest and foster collaboration opportunities.
- **CAB Meetings:** Invitations, minutes and any further material from the Competence Centres and CoEs Advisory Board (CAB) or CAB-CASTIEL 2 C5 Meetings (C5 = the WPL meeting of CASTIEL 2).
- **Legacy Software Reports:** the CoEs will have access to the (labelled as "*Sensitive*") Legacy Software reports (CASTIEL 2 Deliverables D2.4 – D2.6)
- **Notes from Training Meetings:** the summary notes from the joint meetings and information about the training events organised by NCCs.
- **Participation requests:** requests to participate to the organization of events, coming from other CoEs or NCCs.
- **Training material:** the training-related best practice guides, available training-related resources and training materials/documents from NCCs.
- **Results of all mapping activities:** the results from the mapping among NCCs and CoEs, their knowledge, expertise and experience on one side and their needs on the other side will be shared with the CoEs.
- **Communication material:** Resources and material for communication work

Annex 4 - POWER OF ATTORNEY

The undersigned [name of the Centre of Excellence (CoE) partner's authorized Legal Representative] as authorized Legal Representative of [name of the CoE partner's organization] with its registered office in [address], hereby gives [name of the relevant coordinator], the coordinator of the [name of the relevant Centre of Excellence and GA number], the power of attorney to sign on behalf of [name of the CoE partner's organization] the EuroHPC JU CoEs and CASTIEL 2 COLLABORATION AGREEMENT (version of November, XX 2023).

SIGNED:

DATE:

LOCATION: