



D2.1 Plan for targeting CoEs Version 1.0

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Change Log

Version	Author	Description of Change
V0.1	Craig Lucas	Initial Draft.
V0.2	Craig Lucas	Changes after NAG internal review.
V1.0	Craig Lucas	Changes after POP internal review by Juelich.



Table of Contents

Executive Summary	4
1. The Plan	4
1.1 Network.....	4
1.2 POP Services	5
1.3 CoE Formal Periodic Campaigns	5
1.4 Events and Training.....	5
1.5 Other Possible Collaborations	6
Acronyms and Abbreviations	7
List of Tables	7



Executive Summary

This document presents the POP strategy for interacting with our fellow Horizon 2020 Centres of Excellence (CoEs). We will establish a communication channel to enable us to easily promote and provide POP services to them and collaborate on events and training.

At the time of writing FocusCoE is still getting established so we have not made any assumptions about what role it would play in our plans. POP has attended every FocusCoE event so far and plans to be an active participant in the proposed CoE General Assembly, as and when it is established.

We have included examples of previous interactions during POP 1 as well as progress so far in POP 2.

1. The Plan

1.1 Network

POP will formally invite all CoEs to collaborate with POP. We will reintroduce them to the services we can provide, the benefits to their community and how we can work together going forward. We will give a presentation at a suitable Focus CoE event or meeting.

POP partners are members of each COE, and of FocusCoE, see Table 1, although in many cases this won't be the same personnel. We will establish a "point person" within POP for each CoE who will coordinate contact between us and them, thus establishing a formal network.

TASK: Formally invite all CoEs to collaborate with POP.

TASK: Establish network with CoEs, with a single point of contact at POP.

CoE Name	POP Partners who are Members of CoE
EoCoE	BSC, Juelich, RWTH Aachen, UVSQ
BioExcel	Juelich, BSC
ChEESE	BSC, USTUTT - HLRS
MaX	BSC, Juelich
ESIWACE	BSC
EXCELLERAT	BSC, USTUTT - HLRS, RWTH Aachen
HiDALGO	HLRS



CompBioMed	BSC
E-CAM	Juelich
FocusCoE	BSC, USTUTT - HLRS, Juelich, Teratec

Table 1 POP Partners Represented on other Horizon 2020 CoEs.

1.2 POP Services

The core POP services of Performance Assessments (PA) and Proof of Concepts (PoC)ⁱ will be of interest to those CoEs who produce applications.

Example of previous interactions: In POP 1 we undertook services on applications from CompBioMed, BioExcel, EoCoE, ESiWACE and MaX CoEs.

Status for POP 2: Additional services are under way on CompBioMed, EoCoE and ESiWACE applications. Informal discussion has taken place with HiDALGO, who are interested in POP services.

TASK: Identify which CoEs could benefit from POP services.

1.3 CoE Formal Periodic Campaigns

This is a new way of delivering POP services introduced at POP 2:

We will provide a formal structure to support other CoEs, targeted on application domains as well as FET projects, by providing formal periodic campaigns where several assessments of the progress of their applications will be performed.

We will actively promote this service to other, relevant CoEs.

Status for POP 2: 10 PAs are underway for the ChEESE CoE. EoCoE CoE are also planning to submit codes for this initiative.

TASK: Undertake Periodic Campaigns for all interested CoEs.

1.4 Events and Training

POP can provide performance analysis and methodology training workshops at CoE events or at events that are particularly relevant to them.

POP partners will also attend CoE meetings in order to further promote the services we can offer.

Example of previous interactions: In POP 1 we undertook 3 joint training events with EoCoEⁱⁱ and attended a BioExcel User Forumⁱⁱⁱ.



Status for POP 2: POP training was provided as part of an E-CAM workshop^{iv}, and has been requested for additional E-CAM and EoCoE workshops. Multiple abstracts have been submitted to CompBioMed Conference 2019^v.

TASK: Through our established network with CoEs, identify events where training or attendance would be beneficial.

1.5 Other Possible Collaborations

Fundamentally the Horizon 2020 CoEs form part of a wider HPC community. As such, they can contribute to all aspects of the work POP does. The PAs and PoCs of their applications could provide interesting case studies to attract SMEs to POP. Their codes could inform the POP Co-design Activities Work Package. POP dissemination activities such as blog posts and webinars could help the successes of CoEs reach a wider audience.

Status for POP 2: BioExcel have expressed an interest in sharing their experiences through a POP webinar.

TASK: Through regular contact with CoEs, ensure that all possible collaborations are exploited.



Acronyms and Abbreviations

- BioExcel – Centre of Excellence for Computational Biomolecular Research
- BSC – Barcelona Supercomputing Center
- ChEESE – Centre of Excellence for Exascale in Solid Earth
- CoE – Centre of Excellence
- CompBioMed – Centre of Excellence in Computational Biomedicine
- E-CAM – An e-infrastructure for software, training and consultancy in simulation and modelling
- EoCoE – Energy Oriented Center of Excellence
- ESIWACE – Centre of Excellence in Simulation of Weather and Climate in Europe
- EXCELLERAT – European Centre of Excellence for Engineering Applications
- FET – Future and Emerging Technologies
- HiDALGO – Center of Excellence HPC and Big Data Technologies for Global Systems
- HPC – High Performance Computing
- IT4I – Vysoka Skola Banska - Technicka Univerzita Ostrava
- Juelich – Forschungszentrum Juelich GmbH
- MaX – Materials design at Exascale Center of Excellence
- NAG – The Numerical Algorithms Group
- PA – Performance Assessment
- PoC – Proof of Concept
- POP – Performance Optimisation and Productivity
- RWTH – Rheinisch-Westfälische Technische Hochschule
- SME – Small and Medium-sized Enterprise
- USTUTT - HLRS – University of Stuttgart - The High-Performance Computing Center, Stuttgart
- UVSQ – Université de Versailles Saint-Quentin-en-Yvelines
- WP – Work Package

List of Tables

Table 1 POP Partners Represented on other Horizon 2020 CoEs.	5
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ⁱ POP Services <https://pop-coe.eu/services>

ⁱⁱ Workshop on benchmarking and performance analysis <https://www.eocoe.eu/workshop-benchmarking-and-performance-analysis>

ⁱⁱⁱ Excel User Forum. <https://bioexcel.eu/events/bioexcel-community-forum-22-23-november-2017/>

^{iv} Extended Software Development Workshop on Scaling Electronic Structure Applications <https://pop-coe.eu/blog/pop-e-cam-coe-workshop>

^v CompBioMed Conference 2019 <https://www.compbiomed-conference.org/>