

FAIRNESS Cost Action (CA20108)

Joint WG1-WG2 Group Meeting, Dublin May 14-15, 2024

Dublin City University, Glasnevin Campus, Room S212

MINUTES

In-Person Attendees:

Altobelli, F., Dunjic J., Eichelmann E., Sremac A., Galic Z., Paschalidou A., Richardson D., Roantree M. (Chair), Scriney M., Spiliotopoulos M., Dinh C.

Session 1 (In Person and Zoom)

The opening session focused purely on Action Sustainability, with a primary focus on WG1-WG2 activities, services and products, with 5 presentations: Continuation of the FMP (Mark); Communication and Sustainability (Claire Gallacher, Zoom), WG2 Services, Products, Artifacts created over the lifetime of the Action (Mark), Action Transferable Activities (Branislava Lalic, Zoom) and Funding (Mark).

Most of the discussion centered on 2 primary deliverables from WG2: The FAIR Micromet Portal (FMP) and the services created around gap filling. In terms of the FMP, the group explored the obstacles to keeping the FMP in operation, until 2030. For Gap Filling, it was observed that we have 3 separated approaches delivered from the Cost Action: the Gap Filling tool presented by Thomas at the Summer School, the methodology using Python's inbuilt mathematical interpolation functions, and the climate scientist based approach. One of the actions that arose from this discussion was around the one common activity to all 3 approaches: a formal method for gap analysis. It was agreed to revisit this topic during later sessions.

[Action for those present] Provide feedback for Branka on the structure/presentation of the questionnaire around Action transferable activities.

Session 2 (In Person and Zoom): Finalisation of WG2 Tasks

The purpose of this session was to take a snapshot of where we are across the 4 sub-tasks. Are they complete and finished? Have we achieved the goals of the Action but we prefer to continue working on these tasks? Have we not reached our target for any of the 4 tasks? A presentation and update was delivered by task co-leads.

- FMP development and implementation (Michael)
- Pilot data sets & Case studies design (Ana)
- Application oriented indices (Elke)
- Skill & Knowledge Enhancement (Branka)

In summary, it was agreed that all 4 tasks have been completed in accordance with the original goals specified in the Cost Action proposal. However, 3 of these tasks will continue (FMP development, case studies and skills enhancement) as these are regarded a fundamental to the Action's sustainability.

Session 3 (In Person and Zoom): FMP Evaluation

Michael presented an update on the latest functionality of the FMP followed by a discussion on new features which could impact positively on usability and sustainability of the FMP. In summary, 4 areas for FMP expansion were discussed:

- Metadata export to Zenodo
- Appendix Search functionality
- Map-based search function to locate sites on a geographic basis
- This session also included a detailed discussion on the Gap Filling assets and how the output gap analysis could be captured in the FMP.

Session 4 (In Person and Zoom): Case Studies

Case studies are regarded as a form of sustainability for the Action. Data should be on the FMP where possible and discussion should be around projects. This session comprised presentations on 3 case studies. The first case study, presented by Anastasia and Damhan, focuses on exploring the Impact of Particulate Matter on Respiratory & Cardiovascular Mortality. The discussion included a discussion around extended the study to look at air quality, health and economic impact.

The 2nd case study, presented by Ana covered a FAIRNESS Sustainability Tool. This rural, urban and forest research study exploits the FMP for the FAIR Data to be used in the study. 4 countries, Serbia, UK, Greece and Slovakia provide the dataset and research base for the case study. During the discussion, 2 additional partners (2 new countries) expressed an interest in expanding the case study.

Case Study 3, presented by Jelena, focused on the issues of missing data. The discussion centred on Gap Filling Across Multiple Datasets. Also included in this discussion is the creation of a new network capturing a variety of sensors. This case study has a single partner for now and is seeking the involvement of other members (countries) both for a comparative study and in the provision of generic methods (eg gap analysis).

Potential new case studies also emerged from this session. Filiberto discussed an irrigation project in Italy which is using machine learning to predict the amount of water a particular crop requires. A further case study presented by Marios, uses data from 2 catastrophic storms in central Greece in 2023.

Session 5 (In Person): Case Study Deep Dive

The final session was in-person only with the goals of defining precise actions for each of the case studies presented. Discussions surrounded case study involvement, datasets, case study expansion and short to medium term goals.