



Co-funded by the  
Erasmus+ Programme  
of the European Union

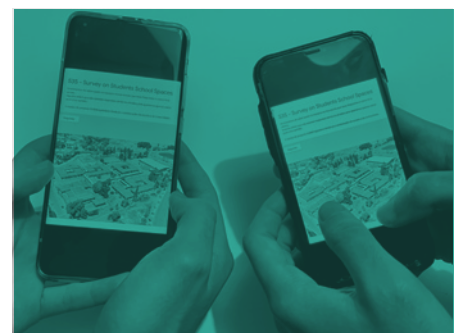
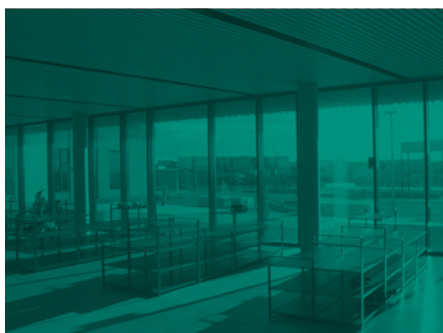
# CoReD



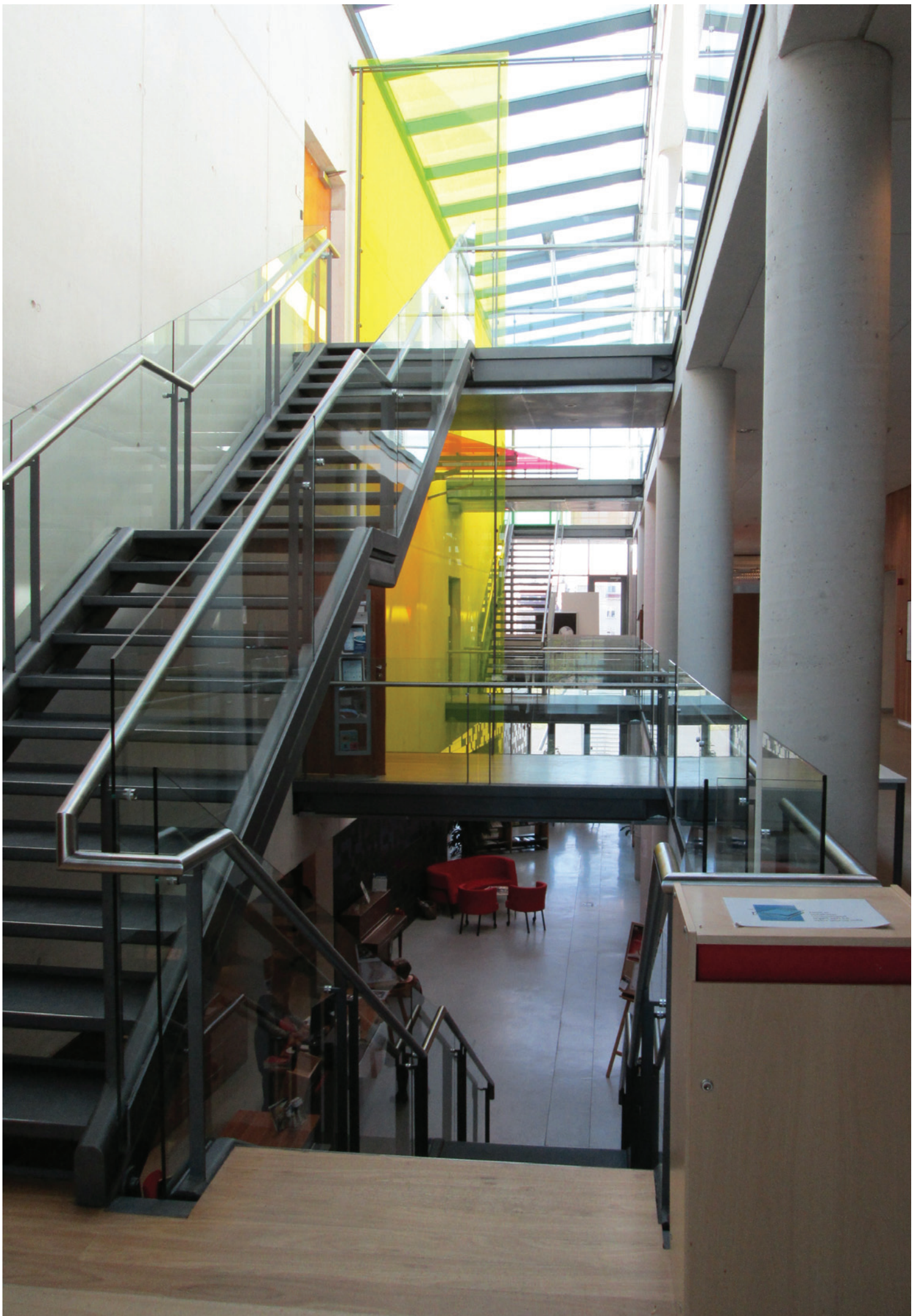
Collaborative  
Redesign  
with schools

## CoReD Principle 1:

Start where people are (mentally and physically)









## Space matters for Education

Physical space and material resources, both what you have and how it is organised, make a significant difference to the processes and products of learning and teaching. Research conducted over the last half century in many different countries and multiple educational settings, has shown the impact of the physical learning environment (Higgins et al., 2004; Byers et al., 2018) and encourages the funders and users of educational infrastructure to try to improve their premises and resources (Blackmore et al., 2011; Duthilleul et al., 2021).



But no learning environment, however 'innovative', is a magic bullet. Just as was seen with developments in IT at the end of the 20<sup>th</sup> century (Cuban, 2001), equipment only gets teachers and students so far. Across all types of educational resources, both physical and digital, the key to success is achieving a match between what you have and what you want (and are able) to do with it. The fundamental importance of this relationship between design and use is the take-home message from numerous attempts at innovative school design in the past (such as 'open plan' schools in the 1960s and 70s) and the present (ILEs in Australia and New Zealand; building for personalised learning in Iceland; schools for the new core curriculum in Finland).

To align the design and use of educational settings, we can look to key ideas developed through participatory user-centred design, which concur with knowledge about educational change: **people need to work together**. Collaboration is central to develop shared understandings of educational values and goals; of the processes and activities needed to achieve these; and of the choice and arrangement of physical resources and spaces that these activities require.

Such collaborations will be different every time, with many local decisions to be made: who should be included in the collaboration (school students? Teachers? Other school staff? School leaders? Municipal decision makers?). When should different groups or their representatives be included? What funding (if any) is available to change the premises? What is the timescale of the change process?

There are, however, some consistencies across participatory processes. Collaboration takes time, and it can be hard to know how to approach discussions about school space with people who see it from the perspective of users, rather than as planners or designers. This is where the CoReD tools come in, presented through our guides, which cover each of four principles for facilitating successful collaborative engagement about school space (Woolner, 2018).

---

**Collaboration is central to develop shared understandings of educational values and goals**

---

This guide is to help you to...

1. **Start where people are (mentally and physically);**
2. Understand the intertwining of physical, organisational and social aspects of school environments;
3. Facilitate the exploration of ideas and possibilities;
4. Appreciate the complex, lengthy process that is change.

## Starting where people are...

School users know their own spaces, but have their particular experiences of them. These are influenced by their roles in school (teacher vs cleaner vs student) as well as their individual preferences. There are many underlying, but unarticulated, values and assumptions – from the individual person, the school and beyond. Then there is the physical space itself and the wider context it exists within – the student space within school premises; the school in the neighbourhood; the local area within the nation. These positions have implications beyond the space, perhaps including financial implications, relationships to decision-making and political connotations.

Following this Principle for Collaboration, it is important to recognise, for any change process, the complexity of the starting point and to build a shared understanding of it, so enabling realistic but ambitious plans to be made.

The activities suggested under this Principle, and the CoReD case studies of tools in use that exemplify them, are all rooted in school communities, their spaces and the things they (try to) do there. But all the examples show people seeking to build shared understanding to support their developing ideas for change.

## Which tools work best to address P1..?

	<b>UK tool:</b> Diamond Ranking	<b>DK tool:</b> Stories of Educational Spaces	<b>SW tool:</b> Pedagogical Walk-through	<b>ISL tool:</b> School Development Evaluation Tool	<b>PT tool:</b> Survey on Students' School Spaces S3S	<b>IT tool:</b> Cartographic observation
<b>1. Start where people are (mentally and physically)</b>	✓✓	✓	✓			✓
2. Understand the intertwining of physical, organisational and social aspects of school environments			✓✓	✓	✓✓	✓
3. Facilitate the exploration of ideas and possibilities	✓	✓✓			✓	
4. Appreciate the complex, lengthy process that is change				✓✓	✓	✓✓

✓✓ this tool is particularly suitable for school communities focusing on this Principle in light of where they are with their particular change process of design, development and evaluation.

✓ this tool can also be useful for school communities focusing on this Principle.

## How can these tools be used?

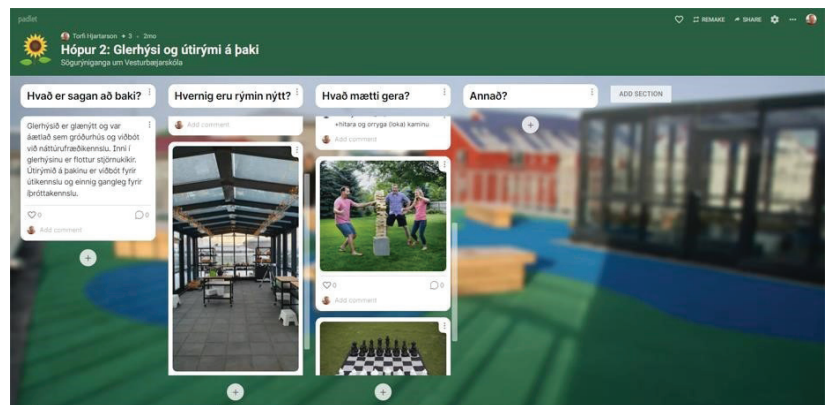
**Diamond Ranking** <https://www.ncl.ac.uk/cored/tools/diamond-ranking/> is a very straightforward tool to use to start conversations about school space. The initial activity, ranking nine images of educational spaces, can be done with photos of your own school or of other settings, according to criteria chosen to fit your project (e.g. 'Where change is most needed'; 'A good place for learning'). It is simple enough for adults, whatever their interests, and children of all ages to complete. But it will also work to frame a sophisticated discussion by professionals about the advantages and disadvantages of their own space and, more broadly, what a good educational environment is like. The CoReD webpage for Diamond Ranking includes image libraries to provide pictures of school space.



### Stories of Educational Spaces

<https://www.ncl.ac.uk/cored/tools/ses/>

is also a very structured activity, with comprehensive worksheets for participants included on the webpage. SES involves participants literally starting from where they are (physically) as they seek out interesting, important or overlooked spots within their schools. In groups, stories are created about how the space is used in the present, how it could have been used in the past and how it might be used in the future. The stories from the past can draw on any historic knowledge that the participants might have, but the option of pure storytelling avoids anyone feeling insecure – so everyone indeed starts from where they are mentally. Groups of either school staff or students can use the tool, with diverse roles tending to produce a wider understanding. A facilitator is needed to bring the ideas together, but online platforms such as Padlet can support this process.



Other CoReD tools are suited to helping educators start thinking spatially about their practices by examining parts of their current educational environment and how it is used.

**Cartographical Observation** <https://www.ncl.ac.uk/cored/tools/cartographic-observation/> involves mapping the use, by learners and teachers, of a specific learning space.

**The Pedagogical Walk-Through** <https://www.ncl.ac.uk/cored/tools/walk-through/> involves small groups visiting a number of places across the school, where sited discussions are held about the spatial constraints, enablers and possibilities.

**Each tool has a webpage where you can find detailed instructions, and sometimes other resources, in all the languages of CoReD.**



## Case study examples from the CoReD project

### Diamond Ranking in an Italian kindergarten where renovation is planned

Within the mountain area of Südtirol (Alto Adige), in the kindergarten district of Brixen, space and room design have long been connected to pedagogical work. Thinking about the design and use of space is actively supported by the kindergarten district management and a programme of refurbishment is ongoing. In a number of kindergartens, Diamond Ranking was used by practitioners for early planning through enabling discussion about how current facilities function and to prioritise areas for renovation.

One kindergarten staff of eleven used Diamond Ranking to consider their premises, which was built in 1976 and where renovation was planned. They used two sets of nine photographs of the kindergarten's interior and exterior spaces, ranking them according to where change is most needed. Ranking the photos and the ensuing discussion enabled staff to look anew at familiar places, as if

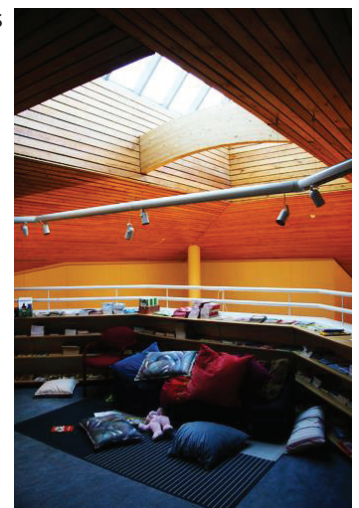
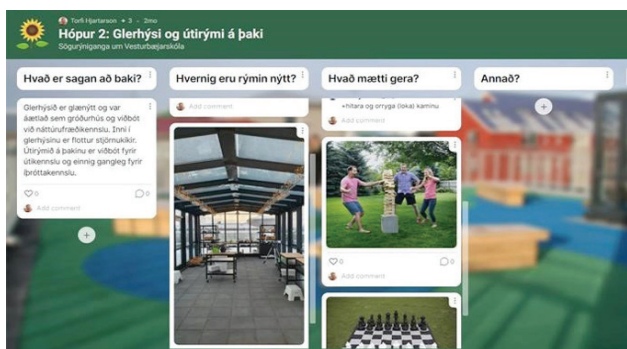


from an outsider's perspective. Although they commented that this was sometimes uncomfortable as they did not look as child-friendly and welcoming as they had hoped, the process enabled them to reach agreement on priorities. These centred on the urgent need to change the entrance, with inside and outside shots of it topping both diamonds – because, outside, there is a large covered area that is not used, and inside the entrance it is dark and uninviting. These judgements and priorities have been fed through to the district and will influence the planned renovation work.

### Telling Stories of Educational Spaces (SES) in the recently built extension to Vesturbæjarskóli, Reykjavik, Iceland

This school has a varied history, having been established in 1958 but moving to a new building in 1988. These premises have since been altered in various ways, most recently with an extension, and currently accommodate

approximately 400 students from 6 to 13 years old. The three areas chosen for SES were within or connected to the recent extension, but were also spaces that the school principal thought were under-used or not used to their full extent. A regular, after-school staff meeting was given over to the SES activities and was attended by 18 teachers.



A short online survey of staff views conducted before the SES activities served to show that the teachers were mainly satisfied with school premises, policies and practices. It also served as an orienting activity in the beginning of the session and helped to ignite interest in evening's activities. Five focus groups of teachers reviewed historical, current and possible uses of the three selected spaces, which were a rooftop glasshouse, open hallway spaces shared by four classrooms and unusual balcony spaces in the 1988 open plan library. The participants brought different background knowledge and experiences to their discussions within these spaces, which enabled them to generate ideas for new uses. Making use of digital walls or 'padlets' proved practical, enabling the teachers to share ideas, pictures and links.



### Pedagogical Walk-through to plan for a future rebuild in Hudiksvall, Sweden

This secondary school was built in 1910 and now serves approximately 350 students aged 12-16 years. An extension was built in 1964, but otherwise it has not undergone many alterations. Renovations are now planned, and the tool was used to evaluate the pedagogical qualities of present facilities. The intention was that ideas generated will inform decisions regarding future changes to increase the match between pedagogical practice, organisational factors and learning space.

A pedagogical walk-through was conducted by four staff (three teachers and deputy head) visiting classrooms and corridor spaces intended for disabled and mainstream students. Interestingly, although the classrooms were more positively evaluated by the teachers, they were able to suggest more activities that *could* happen in the corridors, including learning activities such as exhibitions and group work. Starting where they were, but contributing to collaborative discussion centred on the spaces has thus enabled these teachers to envisage wider uses for this space, with implications for what is planned for the future. A key decision made at the school is to conduct more walk-throughs with all teaching staff before scheduling work on the building.



## Further information – available for free download

For more on aligning design and use, participatory school design and cases from Sweden:

<https://doi.org/10.3390/buildings11080345> (Frelin, A.; Grannäs, J. Designing and Building Robust Innovative Learning Environments. *Buildings*, 2021, 11, 345)

Dip into this thesis for discussion about the relationship of school design and educational practice – as well as examples of participatory design in Danish school spaces:

<https://adk.elsevierpure.com/en/publications/unlocking-learning-spaces-an-examination-of-the-interplay-between> (Bøjer, B. (2019). *Unlocking Learning Spaces: An examination of the interplay between the design of learning spaces and pedagogical practices*)

## References – weblinks provided for universally accessible items

Blackmore, J., Bateman, D., Loughlin, J., O'Mara, J., & Aranda, G. (2011). *Research into the connection between built learning spaces and student outcomes*. Melbourne: Education Policy and Research Division, Department of Education and Early Childhood Development. <https://www.education.vic.gov.au/Documents/about/programs/infrastructure/blackmorelearningspaces.pdf>

Byers, T., Mahat, M., Liu, K., Knock, A., & Imms, W. (2018). *A Systematic Review of the Effects of Learning Environments on Student Learning Outcomes*, The University of Melbourne Technical Report 4/2018. Retrieved from: <http://www.ilet.com.au/publications/reports/>

Cuban, L. (2001) *Oversold and underused: computers in the classroom* Cambridge, Mass: Harvard University Press.

Duthilleul Y, Woolner P, & Whelan A. (2021) *Constructing Education: An Opportunity Not to Be Missed*. Paris: Council of Europe Development Bank, Thematic Reviews Series. [https://coebank.org/media/documents/Constructing\\_Education.pdf](https://coebank.org/media/documents/Constructing_Education.pdf)

Higgins, S., Hall, E., Wall, K. Woolner, P. & McCaughey, C. (2005). *The Impact of School Environments: A Literature Review*. London: Design Council.

Woolner, P. (2018) Collaborative Re-design: Working with School Communities to Understand and Improve their Learning Environments. In: Ellis, RA; Goodyear, P, ed. *Spaces of teaching and learning: Integrating perspectives on research and practice*. Singapore: Springer.



This Guide is part of the set of resources developed by the Collaborative ReDesign with Schools - CoReD - project funded by Erasmus+ programme of the European Union

Start date: 01-10-2019

End date: 30-09-2022

Project Reference: 2019-1-UK01-KA201-061954

