

Urban M Project Challenges and Opportunities for the Greater Birmingham area Action Plan, June 2019

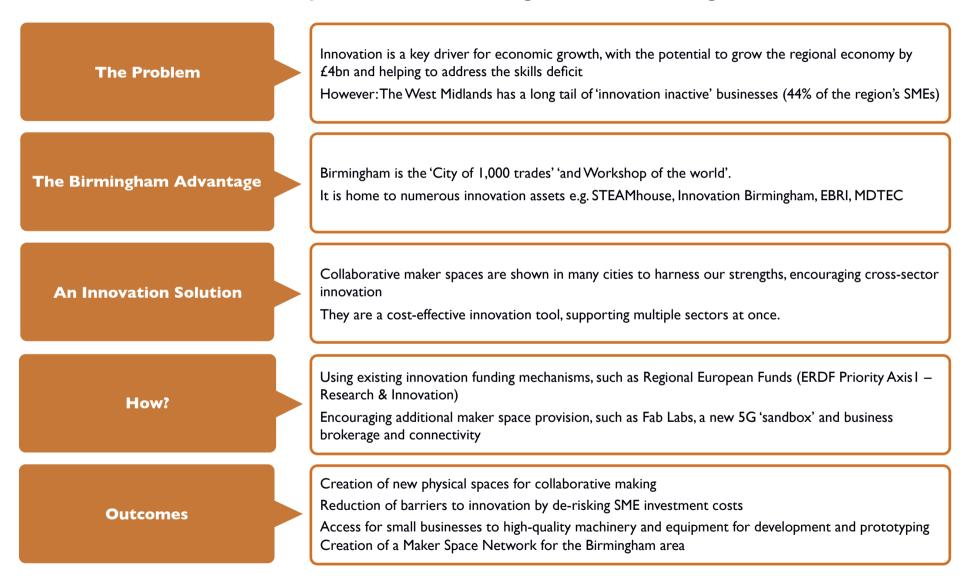






European Union European Regional Development Fund

Summary: Urban Manufacturing in Greater Birmingham



Introduction: Why Urban Manufacturing?

The concept of Urban Manufacturing is part of a wider cross-European shift in policy towards industrial development, in a recognition that 'manufacturing and production segments are returning home'. The shift towards advanced manufacturing, supported by the introduction of new technologies and process, sees production and manufacturing linked very closely to product development and R&D; it is no longer possible for small, agile companies to separate their R&D and production operations. Increasingly, innovating companies are using collaborative production methods such as 3D printing, Fablabs, and community-based networks that are changing the relation with services and R&D.

Linked to this is the growth of the so-called "maker movement" and the general recognition of the benefits of "making things" on small scale collaborative basis. This is very often reflected in collaborative maker spaces such as TechShops, Fab- Labs, and other types of co-working Spaces where small companies and self-employed individuals can use sophisticated equipment and, at the same time, share knowledge and find opportunities to collaborate.

Collaborative makerspaces take many forms, but common to all is the idea of producing physical objects through cooperation. This sharing can occur during ideas generation or fabrication and is most profound when different sectors come together. The benefits of working in this way are numerous and include: new and improved products; an enhanced sense of community; increased mutual knowledge; quicker and more comprehensive solutions; and the tapping of latent potential. This leads to more effective and far-reaching innovation. Examples of collaborative makerspaces include Fab Labs, Open Innovation Centres, Living Labs and Cross-Sector Incubators.

The UrbanM project

The UrbanM project, financed by the EU's Interreg Europe programme, brings together 9 partners from 8 EU countries, to work together to shift regional policies towards the growth of manufacturing in urban areas, through the development of innovation infrastructure, and in particular collaborative maker spaces. Details of all partners are in <u>Appendix 1</u>. The project runs from May 2017 to December 2021.

The objective of the Urban Manufacturing Project is to ensure that collaborative

makerspaces thrive. The project will achieve this through identifying best practice, testing policy approaches and supporting the cities and regions in creating receptive conditions. The project will demonstrate the impact that cooperative facilities can have on innovation and establish a European network of advocates.

This Action Plan sets out some initial thinking of how to apply the learning from the project within the Greater Birmingham area.



Economic Context

In the context of manufacturing growth within Urban Areas, the evidence base within the Greater Birmingham area, reiterated in a number of recent publications¹, identifies three important trends:

The low levels of skills in the workforce: The area is characterised by having too few people with high-level qualifications (NVQ4 and above) relative to the UK, and too many with no qualifications at all. Indeed, the SIA asserts that 'The low skills levels in the region is the greatest weakness in the ecosystem'.

The low levels of innovation in indigenous companies: In the EU's Regional Innovation Scoreboard the West Midlands is the joint lowest performing region in the UK, along with the North East. The region's Science & Innovation Audit identifies that 44% of West Midlands firms are identified as not being innovative. If Greater Birmingham were to close its productivity gap through innovation there is potential to grow the economy by over £4billion.

The connection between these two issues is also crucial: the need for 'innovation skills' (that is, transferable skills such as problem-solving, leadership, design thinking) is vital if the region is to realise its innovation potential.

However, the West Midlands, and Birmingham in particular, have strengths which offer opportunities for growth in Urban Manufacturing, not least that:

Employment in manufacturing industries continues to be high: manufacturing in the region supported 210,000 work-based employees in 2015, with an employment Location Quotient of 1.45, indicating that manufacturing remains far more evident across our economy than the average nationally.

Associated sectors are also strong, particularly in digital and creative industries: The WM SIA area has experienced greater growth within digital and creative sectors over the past five years than any other comparative region within the UK. There are almost 150,000 jobs in the cultural economy, generating a GVA of £3,142m

The innovation infrastructure supports the growth of urban manufacturing: Birmingham has significant innovation assets (incubators, accelerators and similar), second only behind London, and ahead of comparator cities such as Edinburgh, Manchester, Belfast and Oxford. The WMSIA indicates that "Birmingham ... has a very strong offer both in terms of property solutions and value- added services to support growth for early stage firms"

Including the Greater Birmingham & Solihull LEP Strategic Economic Plan (GBSLEP SEP), the same LEP's European Structural & Investment Funds Strategy (GBSLEP ESIF) and the West Midlands Science & Innovation Audit (WMSIA)

Policy Context

The Interreg Europe programme focuses on policy change as an instrument for regional development; it is expected that the changes stimulated by the project will be delivered using other programmes, particularly mainstream ERDF and ESF programmes.

In that context, the significant policy instrument is the The GBS LEP ESIF strategy (January 2014). Of the six programme priorities, the most relevant to this project are:

Priority I (Innovation and R&D) - focussed on the four growth sectors, including;

- Digital and Creative
- Advanced manufacturing

Priority 6: Skills for Growth and Entrepreneurship – focuses on five priority actions, including Developing Skills for Employment

The concept of an 'Innovation Ecosystem' allows us to shift local policies in a way which will address both the skills shortage and the lack of innovation levels.

The SIA notes that "In a strong WM innovation ecosystem, the 'weakest link' is a shortage of skilled people". It then goes on to describe potential action areas which might address the need for physical spaces where networking, interaction and collaborative innovation might occur:

"Addressing the large number of innovation inactive businesses, effort is required to increase the inclination or capacity of businesses to innovate." It goes on to identify a number of key issues to support innovation, two of which are that:

• We must continue to develop our physical infrastructure to keep up, and anticipate the need for grow-on space as we encourage the growth and development of our innovative businesses

and

• Maintaining a geographic spread of assets and networks is also important to make it easy for start-ups to find supportive locations and for easy engagement of SMEs with science and innovation bases

These proposals will be examined further in the context of EU Structural Funds programmes.

Policy challenges

As the single largest functional economic area in England outside of London, and home to some of the country's leading science and innovation assets, the West Midlands area combines both scale and excellence in terms of its science and innovation offer. In order to successfully harness the potential of our assets, however, there are several challenges to overcome. Of the challenges listed below, the two in bold have been identified by partners as the key challenges which can be addressed by the UrbanM project:

- Wider UK productivity challenge: Labour productivity lags behind the other six members of the G7 industrialised nations by 18%, and Germany by 34%.
- Non innovative business: as identified above, a large proportion of West Midlands firms are identified as not being innovative. If Greater Birmingham were to close its productivity gap through innovation there is potential to grow the economy by over £4billion.
- Strengthening Business Support and access to finance: Regional initial growth rate for start-ups is one of the highest amongst LEP areas, however overall survival rate for business starts has been slow to recover from the recession of 2008 and remains below the national average.
- Financial leverage: Our ability to secure funding from the public and private sectors could be improved, including both R&D resources and funds for process scale up or capital investment required to move from R&D to increased productivity.
- Low skills and high unemployment: Whilst our area has a diverse economic base with a range of sector strengths, the working age population has a poor skills profile; with a low proportion holding NVQ2,3,4 and degree level or high qualifications and a higher than average proportion with no qualifications at all.
- Flexibility of ERDF: Although LEPs deliver their own regional ERDF programmes the overall objectives of the funding remain in line with the national strategy. This results in limitations around how effectively the programme can impact locally.

The Urban M Challenge

The project process has led local stakeholders to articulate a specific challenge which could be addressed through the work of the project. The common challenge of Urban Manufacturing is to better support and develop a particular type of innovation infrastructure: collaborative maker spaces.

These spaces are characterised as places where people from different disciplines work together to produce new products and services, and have sprung up throughout cities and regions. Examples include Fab Labs, Living Labs, Open Innovation Centres and Cross Sector Incubators. However, such facilities often struggle to maximise their impact, due to issues such as segregated ecosystems, poor governance and challenging business/financial models.

This is the challenge which was used as the basis for the Policy Clinic in Birmingham, and which local stakeholders have been addressing through the development of this action plan. It is:

How can Birmingham's Collaborative Maker Space infrastructure allow its SMEs to become more innovation active, with a particular emphasis on prototyping?

Collaborative making in the Birmingham area

The working definition of collaborative maker spaces used for the UrbanM project is that they are places dedicated to "producing physical objects through cooperation, typically located within urban areas"

As yet, there is no definitive information on the number or scale of such spaces in the Greater Birmingham area. There appears to be a good coverage of physical facilities to support business growth, and the West Midlands Science & Innovation Audit² identifies:

"..the importance of Birmingham as a location for incubators, accelerators and other related infrastructure to support the development of knowledge-based firms with high growth potential. Birmingham was the city with the third most incubators identified in the research (8), behind only London (27) and Edinburgh (10), and including all assets covered by the research, Birmingham had the second most assets of any city (22) behind London....The data indicate that our area, and particularly Birmingham as the sub-regional core, has a very strong offer both in terms of property solutions and value- added services to support growth for early stage firms."

In the work of the UrbanM project, Birmingham Stakeholders have been introduced to comparable issues and challenges in other European cities and regions, and seen some approaches to dealing with those. These are described in the next section. A full list of stakeholders can be found in <u>Appendix 2</u>.

Through this work, it is clear that in the Birmingham area, there are gaps in provision. In particular, these are:

- Facilities which promote business-to-business collaboration as a core part of their offer
- Facilities which embrace the contribution of the cultural and creative sectors, taking a STEAM rather than STEM approach
- Collaboration between facilities, allowing for cross-fertilisation of ideas

The UrbanM project has already identified case studies of innovative maker spaces in the Birmingham area, which could act as a model and stimulus for future developments. Prominent examples of innovation support facilities include:

² https://www.wmca.org.uk/media/1682/west-midlands-sia-final-for-publication-21617.pdf

STEAMHouse

The STEAMHouse campus, located in Digbeth High Street, will create 93,000 sq. ft. of mixed incubation, collaboration and maker space in the centre of Birmingham. It will create a building which is itself a scalable test bed and 'living-lab' for innovation in the arts and creative industries, but also in terms of being a smart building incorporating the Internet of Things, sustainable urban development and bio-informatics. The project involves 3 elements:

- An innovation space linked to state of the art technology and data, in which complex societal challenges can be seen from an interdisciplinary perspective and reviewed by multiple users
- Birmingham Production Space, an art and design led maker space, which addresses the poor provision of creative spaces in the region, allowing for physical & digital prototyping, iterative development and production.
- A workspace for creative SMEs including live-work and incubation, directly addressing shortages in creative practitioners building new businesses.

MD-Tec

MDTec (the Medical Devices Testing & Evaluation Centre), at the Institute of Translational Medicine, Birmingham, offers a facility for Medical device usability testing

It is a £7M project with ERDF matched funding, offering a State-of-the-art biomaterials laboratory, combined with a Simulation suite for device testing, where companies developing medical devices technology can test their products with real medical staff, in a realistic clinical environment, but not on real patients.

The building presents a unique offering to industry and academics worldwide, and can provide guidance and expertise for SMEs on: usability studies and human factors engineering, intellectual property (IP), certification and quality.

EBRI

The European Bioenergy Research Institute (EBRI) delivers world-class bioenergy and energy systems research. It acts as a focus for international activities on scientific and technological aspects of biomass conversion and utilisation of products for renewable power, heat, transport fuels, hydrogen and chemicals.

Its projects and activities focus on the adoption of bioenergy technologies in both urban and rural settings and the provision of support to businesses, organisations and local authorities to enable them to make informed bioenergy decisions. The types of businesses EBRI is working with includes: Manufacturing and Engineering firms interested in supply chain opportunities; 'Clean-Tech' businesses interested in developing new technologies; Process industries looking to generate value from their waste streams; and IT firms interested in 'smart' solutions for energy supply and logistics.

Innovation Birmingham

Innovation Birmingham Campus is the leading location for Birmingham's digital and tech community; providing office suites, meeting and conference facilities and co-working opportunities for innovators, entrepreneurs and investors looking to develop or fund innovative digital start-ups with high growth potential.

Since its launch in 2016, over 170 start-ups have been incubated in the iconic $\pounds 8m$ iCentrum building, and the Campus is the focus for a community of over 1000 digital techies and innovators

Offering more than just location space, the Serendip Smart City Incubator provides market access and expertise for digital start-ups through close partnerships with major organisations, accelerating the early growth of new business.

2. The learning process

"Fundamentally, I see Urban M as an opportunity to unlock talent and innovation in Birmingham people and businesses in a creative way."

Heather Law, Birmingham City Council

The UrbanM project is delivered through a series of learning activities designed to encourage partners to identify their own good practice, observe good practice in other EU regions, and through reflection and understanding, to improve the delivery of collaborative making in their region. The key events have been:

- I. The identification of Good Practices (a minimum of 3 per region)
- 2. The organisation of 'policy clinics' where each region hosts at leat 3 other EU regional partners to understand and reflect on that city's practice. Birmingham partners attended policy clinics in:
 - San Sebastian, Spain (October 2017)
 - Zagreb, Croatia (December 2017)
 - Lisbon, Portugal (March 2018)
 - Bratislava, Slovakia (April 2018)
 - Vilnius, Lithuania (September 2018)

In addition, Birmingham hosted a policy clinic in June 2018 which was attended by regional partners from all of the above regions, plus additional colleagues from Kranj (Slovenia).

- 3. The creation of a draft action plan based on this work
- 4. Study visits between each city and 1-2 other cities to gain feedback on, and improve, the Action Plan. For this phase, Birmingham worked closely with Lisbon, Rome and Zagreb for exchange study visits in December 2018 and early 2019.

More detail on the events and activities of the project can be found on the project webpage at https://www.interregeurope.eu/urbanm/

3. Collaborative making elsewhere in the EU

Central to the delivery of the UrbanM project is the process of exchanging experience with, and learning from, other regions in the project. Part of the project process is the coordination of 'policy clinics', at which the host region presents aspects of their innovation support system, and receives peer review and feedback from other regions. This also provides an opportunity for the visiting regions to review and appraise their own practice.

Case study I: attracting and retaining talent, San Sebastian, Spain

At the project's first policy clinic in San Sebastian, Spain, in October 2017, a number of interesting innovation activities were presented which have been very effective in the Basque context, and which might provide learning for the Birmingham area. These are based on an overall strategy of positioning San Sebastian as an "innovation City', the key elements of which are:

I.Boosting talent by supporting its development, creating local talent retention opportunities while focusing on the recruitment of people with high capabilities and of local talent abroad. Initiatives here include a 'Connecting Talent' portal, the use of 'talent grants' as wage subsidies for returning professionals, and the 'Innovative Talent' programme to promote the hiring of professionals under 35.

2.Supporting high value-added business projects that are a driving force in the city for the creation of new business opportunities generating employment and having a huge growth potential, especially in strategic sectors with good future prospects. Activities here include subsidy programmes for technological development, internationalisation support for companies, and the 'Yuzz programme' to facilitate the development of innovative business ideas for people under the age of 30.

3.Boosting the innovation ecosystem by means of networking, dissemination platforms, joint promotion, specialised activities, and so on. Activities here include improving links between universities and companies, providing a research base outside of the university (known as 'Talent House') and undertaking innovation skills activities with school-age children.

4.Positioning Donostia-San Sebastián as an innovation city with the help of all city actors, using a common language, forged bottom-up. Activities here include the promotion of an annual 'Innovation Week' of activities and events, and providing a web portal which links the innovation offer to the city's cultural and lifestyle offer.



Case Study 2: Innovation as a driver for start-up growth, Zagreb, Croatia

Zagreb experiences a particular policy challenge to stimulate enterprise, including start-ups and entrepreneurship. In response, Urban authorities have positively engaged with voluntary and community associations which can play a role in innovation.

Radiona is a community-level project which aims to inspire people to engage in digital and technical maker activity through fun, creative and collaborative projects. The project objectives state that:

Radiona / Makerspace has been founded in order to enhance the visibility of makers' open source culture and self sustainable production, as well as with an aim of connecting all possible fields of art, science and technology.

It organises and runs events, hackathons and festivals in universities and public buildings, where people with a passion for electronics and its potential creative application come together to create new technological applications, including work with museums to display art through new media. Radiona is community based and encourages participants of all ages, from all walks of life to participate in workshops and exhibitions. There is a minimal membership fee and the aim is to provide an open environment for everyone so technology is demystified and lifelong learning encouraged.



Case Study 3: Stimulating Innovation amongst primary schools, Zagreb, Croatia

Spreading innovation activity into younger generations has been a policy priority in Croatia, encouraging young people to consider entrepreneurial and innovative routes into employment.

The Croatian Makers league is a privately established project which aims to enable a wide-ranging inclusion of robotics, automation and programming into elementary school education.financed through crowd funding, with a singular vision to inspire and foster a new generation of coders, the project has managed to engage with 85% of the schools across Croatia.

Relatively cheap Micro bits were distributed to primary schools which enabled children to acquire basic digital competencies and then progress onto more complex robotics. The project then set up competitions close to the schools where teams of children compete to solve a series of tasks requiring the use of a robot. By introducing coding through fun activities at a young age and where children are required to work collaboratively in maker space environments, you not only encourage a generation of coding boffins, but also sew the seed of collaborative making at a young age.



Case Study 4: Bratislava Lab

An innovative approach to community engagement in innovation is shown in Bratislava's Lab.cafe <u>www.lab.cafe</u>. At the beginning of 2016, Orange, Alliance Stará Market and Connect joined forces to develop a creative space which combines a café and maker space in a central location on a busy city square. The cafe is at street level, the workshop in the basement. The managers describe it as a place "to develop your thoughts and give them a real shape". In the workshop, a wide range of machines ranging from handheld to hi-tech 3D printers, laser cutters and the like are available for use, supported by centre staff.

The model is particularly interesting in that it survives on no public subsidy, but operates on a financial model which combines private investment, membership fees and income from the café. There are 3 tiers of membership (basic, medium and heavy use) which start at \notin 9/month.

The space has been highly successful, and creates sufficient income to continue to invest in new machinery and resources.

Case Study 5: Lisbon FabLab

Lisbon FabLab (<u>www.fablablisboa.pt</u>) is a digital manufacturing and prototyping laboratory with the aim of supporting creativity and the development of new collaborative projects through access to equipment and knowledge. It was established by the City Council of Lisbon in a former industrial building.

FabLab Lisboa is equipped with a set of accessible and safe tools, such as small and large milling machines, laser cutting and vinyl cutting machines, 3D printer, and also has computers and their computer programming tools supported by CAD and CAM software.

The methodology adopted is the "learn by doing" that starts with the digital design of the project by the author and materialize it in the equipment available from the local Fab Lab. Just reserve the equipment available in FabLab Lisbon and come develop your project. The Lab is open 2 days per week (free of charge) for experimentation and prototyping.

On other days of the week, the equipment can be reserved for project use with a set of published fees. Staff are also available to support users.





Case Study 6: Vilnius Tech Park

The centrepiece of Vilnius' innovation ecosystem is Vilnius Tech Park: <u>http://vilniustechpark.com/</u>. The Tech Park occupies a large site in Sapieha park, originally a home to the palace of a famous Lithuanian noble family of the same name, then re-purposed in the 19th century, to house a military hospital.

In 2015, private investors partnered with Vilnius City Municipality to refashion the existing park and its buildings into a bold new vision:Vilnius Tech Park. Today Vilnius Tech Park serves as the biggest ICT startup hub in the Baltics and Nordics, uniting international startups, tech companies, VCs, accelerators, incubators and other ecosystem players with a mutual goal – to shape the region's startup ecosystem and grow together internationally.

With over 9,000 sq meters of office space, the Park hosts a community of 50+ innovative companies, ranging from freelance developers and designers to fast-growing startups and established players. No single industry focus ensures that different entrepreneurs could learn and grow together.

Also within one of the buildings in the park is Miesto laboratorija – <u>http://www.miestolaboratorija.lt/</u>Inspired by the examples of community centres in Amsterdam, Copenhagen and Berlin, the community facility exists to educate local people about the sustainable lifestyle. Innovative green activities such as Hydroponic gardens, interior design inspired by secondary use, educational workshops for the public, and an energy saving system are displayed in the facility, alongside a multi-purpose "City Laboratory" space, designed to be an experimental venue available to everyone.



4. Improving Urban Manufacturing in Greater Birmingham

Culture change around collaborative maker spaces

Manufacturing is, and has been for many years, at the heart of the west Midlands economy. It also features large in present-day strategic documents, highlighting the importance of supporting a thriving manufacturing sector. However, there is still a gap in strategic thinking, in that the majority of Urban Manufacturing in the Greater Birmingham area:

- Takes places at the premises of one particular company, refining products for that company's markets
- Has connections with the city's technological and scientific expertise via mainstream research at large institutions
- Is often linked to the supply chains of major industries such as automotive or biotech industries

The concept of 'collaborative maker spaces' challenges these assumptions, and presents a complementary model which is well-suited to the needs of smaller, start-up of early-stage, creative companies which

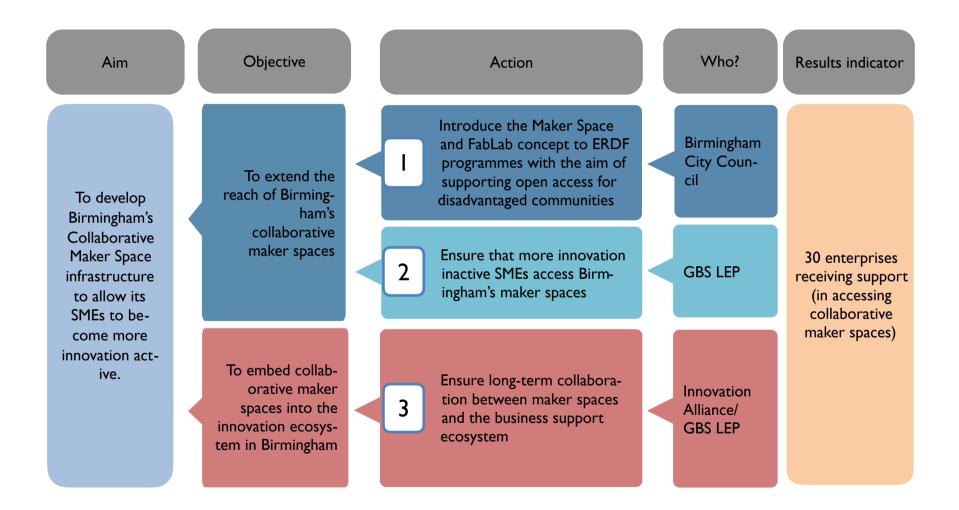
The UrbanM project focuses on three broad areas of activity which should be embraced in order to improve support for collaborative maker spaces, which act as a helpful guide to the policy requirements which should be considered when supporting urban manufacturing and collaborative maker spaces:

- 1. **Collaborative Incubation** identifies ways in which stakeholders from different sectors can focus on STEAM approaches (*Arts* into *Science Technology Engineering and Maths*), developing maker communities and understanding the city innovation ecosystem.
- 2. Collaborative Investment will tackle policies on funding for maker spaces and identify ways of measuring the results of Investment
- 3. **Collaborative commercialisation** will focus on supporting companies with routes to market (including supply chains) and developing policies to support collaborative enterprises.

In order to address these needs, and the broader economic challenges identified earlier in the document, Birmingham City Council is working to develop an action plan which can be delivered with stakeholders supportive of the urban manufacturing approach. In the context of the Interreg project, Birmingham has actively promoted and showcased STEAMHouse as a positive example of how the problems and challenges outlined throughout the project process can be overcome. STEAMHouse has done this through a collaborative maker space bringing together science, technology, engineering and maths and the arts. By harnessing new technology in a co-working environment, in a state-of-the-art model, STEAMHouse has created a new way of working in Birmingham . Our action plan seeks to build on this good practice by further developing Birmingham's eco system.

The provisional actions, shown graphically below, concentrate on the key policy challenges, and are built around examples of good practice seen through the project. The overall result of this activity will be to support 30 enterprises receiving support (in accessing collaborative maker spaces)

Policy change: Action Plan proposals



Action I

Ensure that more innovation inactive SMEs access Birmingham's maker spaces

Specific Action proposed

To develop a programme of activity which can be identified within a future ERDF call for proposals, to support the engagement of SMEs in innovation activity through maker spaces

Why is this important? Context and relevance to the project

The low level of SME innovation is identified as a key weakness in the West Midlands economy. The area has high levels of SMEs, but they do not access innovation services, or identify themselves as having innovation potential.

The UrbanM project has identified several examples of maker spaces which attract existing self-self-employed individuals and small enterprises to engage in innovation activity such as prototyping, product design and development, process innovation and business-tobusiness collaborations.

Inspired by Case Study 5 (Lisbon's FabLab) and Case Study 4 Bratislava Cafe-Lab.

Who owns the policy? Who can be involved in change? Key Stakeholders

The action is aimed at managing directors/owners of existing small companies which have potential to grow but are not currently doing.

To deliver this change, partners will work with the ERDF Managing Authority to Co-create a change in policy , modifying the terms of reference for an ERDF call under the innovation priority

When can we make this change? Timeframe

Initial discussions in Dec 19 Terms of reference produced in Feb 19 ERDF call published in March 19

Funding

The proposed change will identify West Midlands ERDF funds which can be used for maker space activity

Action 2

Introduce the FabLab concept to ERDF programmes with the aim of supporting open access for disadvantaged communities

Specific Action proposed

To develop a new maker space, aimed at supporting new skills in people in disadvantaged communities, in an accessible location. The facility will be combined with access to introductory-level technology and equipment and business support

Why is this important? Context and relevance to the project

The Action Plan identifies issues with low skill levels across the West Midlands. These are particularly prevalent in disadvantaged communities, such as those targeted by the UIA project USE-IT!

The initiative will encourage people to get connected to a facility not currently in their neighbourhood, introduced to a supportive network of like-minded people, and be trained in new skills and technologies.

Inspired by Case Study 4 (Bratislava Cafe-Lab), Sase Study 6 (Miesto Laboritorija, Vilnius), and Case Study 2 (Radiona, Zagreb).

Who owns the policy? Who can be involved in change? Key Stakeholders

The action is aimed at people looking to become self-employed, particularly people who have existing skills in craft & making.

It requires the engagement and support of the ESIF sub-committee for innovation and the UIA programme for USE-IT!

When can we make this change? Timeframe

Initial discussions in Dec 19 Terms of reference produced in Feb 19 ERDF call published in March 19

Funding

The proposed change will identify UIA funds which can be used for maker space activity

Action 3

Ensure long-term collaboration between maker spaces and the business support ecosystem

Specific Action proposed

To develop a network of maker spaces so that existing maker spaces in the Birmingham area can work more closely togehter, sharing knowledge and experience and creating progression routes for individual users.

Why is this important? Context and relevance to the project

The Action Plan has identified that 'collaboration between facilities, allowing for cross-fertilisation of ideas' is a weakness in the Birmingham innovation ecosystem.

Throughout the UrbanM project, international partners have identified similar weaknesses in networking and sharing experience between existing maker spaces. This has been a theme of almost all policy clinics, and highlights the need for a well-functioning network, combined with cross-referral techniques so that individual users of maker spaces feel that their needs are supported and that progression into innovation is possible.

Inspired by Case Study I (San Sebastian 'Innovation Week')

Who owns the policy? Who can be involved in change? Key Stakeholders

The action is aimed at existing innovation facilities which have a 'maker' dimension (that is, they are involved in craft, fabrication, prototyping or manufacturing). The lack of a formal structure for these facilities means that a bottom-up desire to improve collaboration must be required. It is possible that ERDF funds could support this, requiring the buy-in of the ESIF sub-committee.

When can we make this change? Timeframe

Initial discussions in Dec 19 Terms of reference produced in Feb 19 ERDF call published in March 19

Funding

The proposed change will identify West Midlands ERDF funds aimed at maker spaces, a small proportion of which could support stronger networking and collaboration.

Monitoring progress

Key to the local success of the UrbanM project is continual monitoring of the actions proposed in this plan.

Local partners, led by Birmingham City Council, will monitor progress on the revised calls for ERDF projects which will be issued in 2019. BCC, through its role in ERDF committees, will review the call documents and maintain contact with the projects which will introduce maker space activity into the city. Contact will also be made with the individual project promoters to gain qualitative feedback on the progress of the project linking to the aims of the action plan.

The overall project target to support 30 businesses to engage with maker spaces will be part of the ERDF project delivery. The local ESIF committee will receive reports on project progress and will monitor the achievement of this target, which will be reflected in ERDF project output targets.

Finally, BCC and its stakeholders will encourage ongoing links with non-ERDF projects, by maintaining contact with stakeholders and project sponsors and identifying local projects which assist in the delivery of maker space activity and contribute to a maker space network.

In order to ensure ongoing progress, the actions will also be facilitated through the ongoing meetings of the stakeholder group which will be facilitated by BCU in the second phase of the project.

Future collaboration

The spirit of international exchange and collaboration is at the heart of the UrbanM project. It is a source of ideas, inspiration and know-how which allows participating cities to share good practice, successes and failures to improve their own approach to collaborative making.

During the transition period of the UK's withdrawal from the EU, local partners will be examining ways to continue collaboration with EU partners on topics of significance to the West Midlands economy. At present, the UK will continue to participate in EU Territorial Cooperation programmes until the programme end in December 2020. Specific projects, such as UrbanM, will continue to be delivered beyond this date. During that time, 2 areas of inquiry will guide our approach to future collaboration:

- 1. Proposals will emerge for successor regional development programmes (the Shared Prosperity Fund), and it is hoped that these will retain some element of sharing good practice and knowledge transfer
- 2. It is not yet known in which, if any, EU cooperation programmes the UK will continue to participate from 2021 onwards. It is still hoped that some form of EU cooperation will be included in these proposals, and that Birmingham partners will continue to work alongside EU partners on topics relating to innovation.

Appendix I: Full details of all UrbanM partners

Partner No.	Project Partner	Country	NUTS2 Region
I	Birmingham City University	UK	West Midlands
2	Birmingham City Council	UK	West Midlands
3	Lisbon City Council	Portugal	Área Metropolitana de Lisboa
4	Fomento San Sebastian, Economic Development Agency	Spain	País Vasco
5	Lazio Region	Italy	Lazio
6	City of Zagreb	Croatia	Kontinentalna Hrvatska
7	Municipailty of the City of the Slovak Republic, Bratislava	Slovakia	Bratislavský kraj
8	Vilnius City Administration	Lithuania	Lietuva
9	BSC, Business support centre Ltd., Kranj	Slovenia	Zahodna Slovenija

Appendix 2: Birmingham Stakeholder Group

Birmingham City Council	Aston University
Eastside Projects	SteamHouse
University of Birmingham Medical Devices Testing and Evaluation Centre	European Bioenergy Research Initiative
Innovation Birmingham	Initiative for Social Entrepreneurs
Birmingham City University	Urban Hax
Umake	West Midlands Innovation Alliance