FOODMETRES

Food Planning and Innovation for Sustainable Metropolitan Regions

Integrated Report D6.3

FOODMETRES Knowledge Brokerage Platform

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Content

1 Summary

This document fulfils the first part of the completion of Task 6.3, that of developing a specification for a Knowledge Brokerage Portal. This task represents direct input to task 5.2, to design and develop the knowledge portal. As such, the two task reports should be read in combination and markers have been placed in this report where information needs to be understood in relation to developments in Task 6.2.

2 Knowledge Brokerage in FOODMETRES

Knowledge Brokerage (KB) is an integral part of the FOODMETRES project:

Knowledge Brokerage in FOODMETRES aims to build networks which facilitate knowledge exchange, by bridging gaps between stakeholders in metropolitan regions, to promote innovation in short food supply chains (SFSC) for urban and peri-urban agriculture.

In general terms, KB is about bringing people together - researchers, policy makers, practitioners - to enable effective knowledge transfer to support evidence-based decision making (CHSRF, 2003 Clarke, *n.d.*). KB is an intermediary activity which takes place to bridge the 'research to practice' gap, to manage the boundaries between science, policy and practice, and to link the producers and users of research (Karner *et al*., 2011). Therefore, our aim is to provide easy and client tailored access to relevant project data, information and knowledge, for policy makers and stakeholders' (DoW, 2012). The Knowledge Brokerage Platform, developed as part of FOODMETRES, is a key element and component of facilitating this knowledge transfer.

Within the FOODMETRES project, Knowledge Brokerage has been conceptualised as taking place at three inter-related scales (see Figure 1), referred to as Spheres of Knowledge Brokerage.

Knowledge Brokerage occurring within Sphere 1, between partners within the project, is ongoing throughout the project and is represented by meetings, discussions in relation to work and has been epitomised in the development of the specification of the KB Portal with partners from ZALF, Coventry University, IFR, Wageningen and Alterra all working together to develop the proposal. At a later stage in the portal development, partners will further collaborate and share ideas as material and content is sought for populating the portal.

As a resource, the KB Portal once completed will provide project stakeholders with the means of accessing information and data from across the FOODMETRES case study regions involved in the study; thereby granting project stakeholders access to a wealth of comparative information from across several metropolitan regions with which to compare to their own case study findings. In addition, the KB Portal can feature in the dissemination of data to stakeholders at the second participatory workshop meetings. Furthermore, project stakeholders will be invited to provide commentary and feedback on the portal at these workshops prior to final launch.

The third sphere of knowledge brokerage within FOODMETRES, as shown in Figure 1, relates to the relationships between the project and wider audiences both within and beyond our metropolitan regions. It is in this sphere, that the KB platform will play a significant role in terms of disseminating the knowledge generated within FOODMETRES to interested external audiences.

As indicated later in this paper, it is our intention to use each of the three KB spheres to a) populate the portal (responsibility of Sphere 1 partners), b) share, disseminate and reality- test our project findings (with Sphere 2 stakeholders via participatory workshops) and c) provide opportunities via guided presentations, entrance doors and pathways for interested parties, academics and policymakers (Sphere 3 communities) to engage with the tools, concepts and evidence generated as part of the FOODMETRES project through an open-access interactive knowledge brokerage platform.

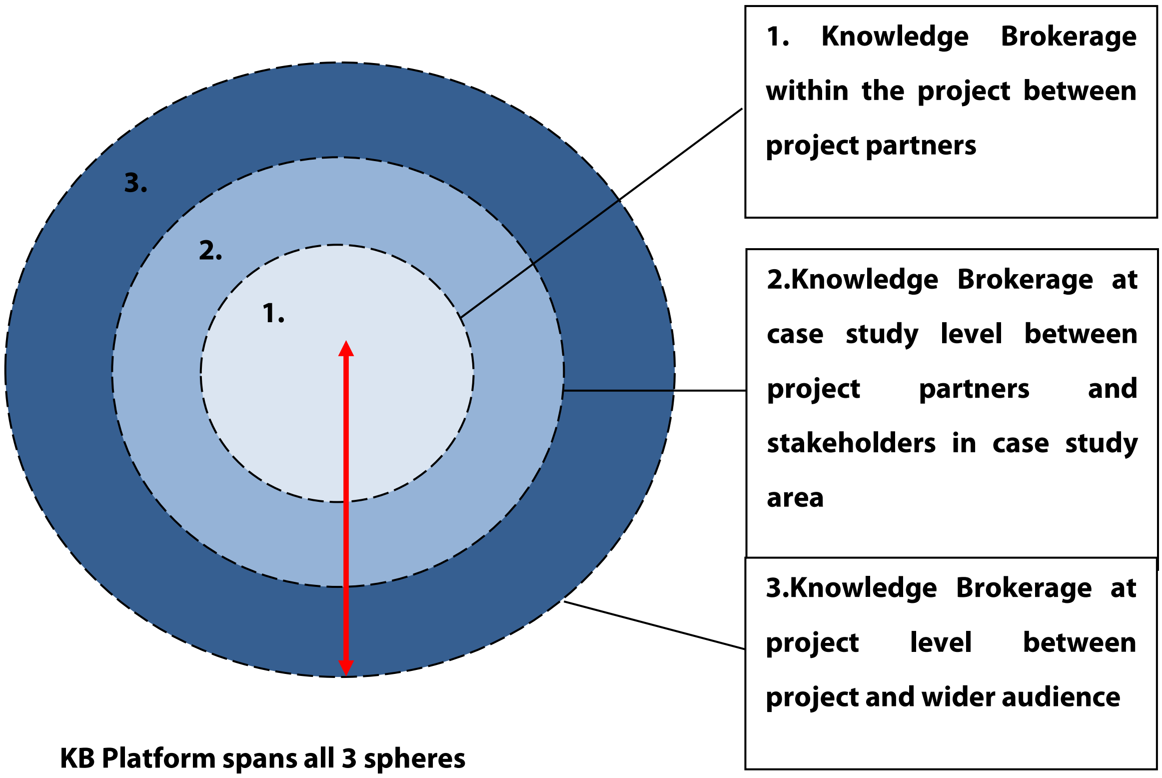


Figure 1. Spheres of Knowledge Brokerage

3 Task Description as defined in the DOW

Task 6.3 requires the development of a specification for a FOODMETRES knowledge brokerage portal:

"IFR/UCOV will provide a specification to Alterra for the design of an online Knowledge Brokerage Platform. This will be accessed via a portal hosted on the FOODMETRES website maintained by the Project Coordinator" (Task 6.3)

As indicated previously, the development of the Knowledge Portal was undertaken as part of Task 5.2 by ZALF.

4 Portal Vision, objectives and goal

Over a number of months (June 2015 – March 2015) FOODMETRES partners (Sphere 1) were consulted and asked for their contributions in relation to the FOODMETRES Knowledge Brokerage Platform.

The consultation consisted of a number of position papers and a presentation, draft specifications are included in an annex to this report:

- KB Portal Position Paper (June 2014)
- KB Platform Presentation (September 2014)
- KB Platform Working Paper (December 2014)
- Specification 1 (January 2015)
- Specification 2 (January 2015) combination of 5.2 input and Skype calls
- Specification 3 (March 2015)

The process of consultation and negotiation with partners aided the development of the Portal's Vision, Goals and Objectives

Vision

- provide FOODMETRES with a repository of data and information pertaining to the activities and outputs of the project which is accessible to project partners, stakeholders and wider audiences beyond the project deadline.

Objectives

- to make project data publicly available (and interactive where possible), share best practice, facilitate knowledge brokerage and raise awareness of the project, its efforts, activities and contributions.

Goal

- to make FOODMETRES data readily accessible so that relevant data from FOODMETRES can be shared and potentially contribute to future policy and food-planning debates.

5 Portal audiences, pathways and structure

5.1 Likely portal users and required functionality

- **Project partners –** academic and SMEs
- **Project Stakeholders –** all those invited to meetings/workshops
- **Wider academic/researcher community**
- **Wider practitioner community**
- **Wider public policy/policymakers community of interest**

We envisage that the KB Portal will be of interest to a wide range of audiences with a broad spectrum of interests and knowledge requirements. The Portal has been designed with several entrance doors to accommodate such variances in demand for information and insight. The following sections explain in greater detail how people will navigate the site in order to access the policy information required, impact field, supply chain types or case study specific materials.

With regards to site functionality available to users of the Portal, only FOODMETRES partners will have administrative rights or the ability to upload material. The Portal is intended as a stand-alone, static, knowledge platform meaning that once content has been agreed and signed off by partners it will be published online. User functionality will be limited to reading materials online and in the case of the policy briefs downloading the documents as word or pdf documents.

Given that there are no ongoing resources for maintenance and updating of the KB Portal once the FOODMETRES project has concluded there will be no interactive elements such as Contact Forms, Blogs or additional membership opportunities. Should interested parties seek to obtain more information about a specific element, tool or part of the FOODMETRES project there will be additional contact information provided directing users to appropriate team members.

5.2 User Interaction with the site

The specification described below (KB Specification 3) was developed in partnership with colleagues from ZALF (as part of their Task 5.2). Further details can be found in Deliverable 5.2.

Starting point: In the FOODMETRES project, the generated knowledge and information is quite different in terms of in-depth view and comprehensiveness: While there are specific foci on some short food supply chain types (e.g. urban agriculture) or impact areas (e.g. health or logistics), there is also a comprehensive elaboration with other chain types, impacts or case study results. Further, the different topics are partly interlinked, some are more fragmented and isolated some are more integrative

Concept: To have a common approach to this heterogeneity of FOODMETRES knowledge, a guided presentation and access (via "Entrance Doors" and "Pathways") would be a suitable way of communication.

"Entrance Doors" and **"Pathways"** would lead to individual **factsheets** (webpages), which make use of the various FOODMETRES outputs, such as qualitative portraits of specific examples of SFSC, to the Sustainability Impact Assessment (SIA) and the Metropolitan Footprint Tool (MFT) tool, to reports, etc.; they make all use of already existing documents from the project.

Each output can also be accessed through different pathways and entrance doors (e.g. a portrait of urban gardening in Ljubljana could be accessed through "Metropolitan Regions>Ljubljana" and through "SFSC>Urban Gardening")

Three **Entrance Doors (Level 1)** allow user interest oriented access to information for the different dimensions of sustainable metropolitan food:

- Interest in specific food chain type? → **Entrance Door (1) "Short food supply chain types"**: 7 different SFSC types, with particular focus on a few (e.g. urban gardening (task 4.4 + some case studies), community supported agriculture (in the Berlin case), Food Clusters (in the Rotterdam case)

- Interest in some impact field or policy objective? → **Entrance Door (2) "Impacts / Indicators / Policy Objectives"**: 15 impact areas, with detailed focus on a few (e.g. logistics (task 3.1), health (task 3.2), land use (change) and eco-efficiency (task 3.3, 5.3); Additionally, access to the interactive SIA tool.
- Interest in case specific information? → **Entrance Door (3) "Metropolitan Regions"** (6 case study regions, including the maps of Metropolitan Foodprint Tool (MFT)

There could be a more highlighted or even exclusive position of the Short Food Chain Types (and a linkage to the Impacts/Policies & Places/Project via the chain types (can be discussed).

Level 2: Pathway information: brief, easy-to-grasp information about the specific aspect (e.g. about an impact area, about a case study, about a food chain).

Level 3: Factsheets: This can be different type of FOODMETRES output, e.g. a portrait of a food chain example, an analysis, etc.

Example for such approach: http://project2.zalf.de/claimknowledgeplatform/index.php (here in total 6 entrance doors, 34 pathways leading to 25 factsheets are applied) → for FOODMETRES we could have 3 entrance doors, 28 pathways leading to maybe 20 or so factsheets plus additional SIA and MFT tool

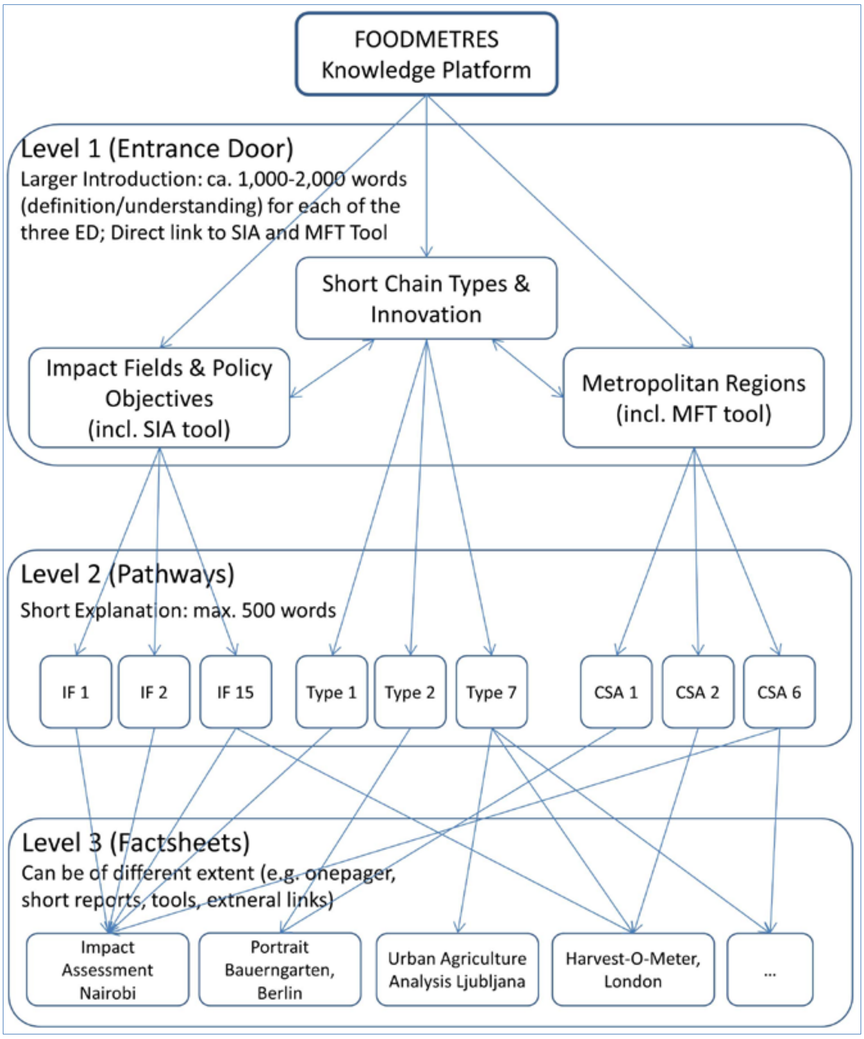


Figure. Information access scheme on knowledge platform.

6 Entrance Doors (ED)

The main purpose of level 1 elements (entrance doors) is to provide orientation and introduction by general information about the topic and the related sub-elements to enable end-users to reflect on the individual findings and insights from the case study regions. The information channels can be accessed via different "Entrance Doors", which operationalize different dimensions of sustainable metropolitan food – (i) metropolitan regions, (ii) food chain innovation, (iii) tools and models, as well as (iv) policy and research. Entrance Doors introduce to theoretical and empirical knowledge focussing on this regional influence.

6.1 ED 1 Metropolitan Regions

Studying, comparing and discussing different social-economic and environmental impacts of innovative food chain systems in selected case studies are at the heart of the FOODMETRES approach. Though we use the current ecological footprint of urban food consumption (in global hectares) as a point of departure, we are ultimately interested in the concrete food chain innovation and land use potentials of the surrounding metropolitan regions in terms of the available 'local hectares'. Spreading the case studies over five EU regions and one developing country allows us to not only compare internal food market regimes, but to analyse different dimensions of global trade in terms of resource management, logistics, food safety and other issues. In each of the case studies we study the food chain performance of up to 8 commodities (some of them common – e.g. dairy products, others only regional – e.g. asparagus), making use of sustainability criteria such as energy, labour, resource efficiency, seasonality, biodiversity, water protection, pesticide use, etc.). The six selected case study cities are: Rotterdam (The Netherlands), Berlin (Germany), Ljubljana (Slovenia), London (United Kingdom), Milan (Italy), Nairobi (Kenia).

The **ED1 Metropolitan Regions** focusses on the specific regional situation in the FOODMETRES case study regions. They are directed towards end-users, which are interested in the specific quantitative and qualitative empirical findings, including model applications and workshop results as well as presentations of short food chain innovations (portraits) in the six case study regions. Therefore it is the **objective** to provide links to all factsheets, which are related to a specific region. This ED is also directed to end-users, which are looking for innovative regional solutions to be applied elsewhere. In this sense the knowledge transfer in oriented to academic users and practitioners.

The **pathways** are following the six case study regions, which are represented by different numbers of factsheet contributions: Rotterdam (N=6), Milan (N=6), Nairobi (N=2), Ljubljana (N=7), Berlin (N=9), London (N=7). Differences in the number of factsheets per metropolitan regions occurred, as some models and tools are only applied in some case study regions. This also applies to the number of specific food innovation portraits.

6.2 ED2 Food Chain Innovation

Generally in the agro-food system, technological innovation is still considered the main driver for creating a competitive business advantage, rather than focussing on forms of social, economic and environmental innovation. Building on the work by Avermaete et al. (2003) we see added value in incorporating these innovation domains in an integrated research approach which we call system innovation. Drawing on Van der Vorst and Beulens (2002), FOODMETRES uses a list of redesign strategies for attaining more sustainable supply chain objectives and addressing the various system dimensions of food chains from a business perspective. Innovation storylines focus on innovation domain(s) and redesign principles that are relevant to regional stakeholders (mainly entrepreneurs) for developing more sustainable food chains. Beyond product innovations, these may emphasise process innovation such as the use of alternative energy sources or different forms of logistical arrangements. They could also target social innovation by involving the consumers at an early stage of the food chain – e.g., during the harvesting of food, or in governance innovation integrating new stakeholders into local food planning strategies.

It is the **objective** of the **ED2 Food Chain Innovation** to provide a structures access to the food chain innovation studied in FOODMETRES. The particular strength of the FOODMETRES approach here is that it covers a broad range of food chain innovations, which address transport efficiency and logistical aspects, social and environmental aspects as well as business solutions.

The **pathways** are following the logic of the different types of short food supply chains, namely (i) Urban Agriculture and Gardening (N=6), (ii) Consumer-producer-partnerships (e.g. CSA) (N=5), (iii) Direct Marketing to consumer (on-farm) (N=1); (iv) Direct Marketing to consumer (off-farm) (N=2); (v) Direct Marketing to enterprise and catering (B2B) (N=5); (vi) Metropolitan Food Cluster / Agro-park (N=2).

6.3 ED3 Tools and Models

The **ED3Tools and Models** represent somewhat the core of the FOODMETRES project, as it provides access to a set of instruments, which help academic users, stakeholders and decision-makers to analyze spatial and sustainability consequences of food demand and supply as well as of innovations in the food chain, connecting both.

Within the debate of urban resilience and metabolism, reduction of ecological footprint and self-sufficiency, regionalized food systems and shortening of supply chains have gained increasing importance. Manifold benefits, such as reduction of vulnerability against crisis situation of the global food supply, more efficient energy and resource use or social welfare and competitiveness of the regional food sector, have encouraged many metropolitan jurisdictions to develop food policies, aiming at fostering local food systems and reconnecting cities with their foodsheds. As a precondition to policy making, analytical models are required, which determine the spatial extent of surrounding farmlands necessary to provide sufficient food, respectively the regional food balance between production and consumption.

In the FOODMETRES approach, the question of the area demand for food supply is addressed by the Metropolitan Area Profile and Scenario (MAPS) tool, which adopts a straightforward data-driven approach of connecting regional food demand (local hectares) with the regional area productivity. Its main strengths are (1) the spatial representation (mapping approach), (2) model differentiation of commodity types, (3) the ability to apply different food production regimes (e.g. organic farming, food loss) and consumption patterns (e.g. vegetarian, healthy diets) or population scenarios, and (4) the analysis of theoretical self-sufficiency levels at different administrative levels. The Metropolitan Foodscape Planner (MFP) offers (1) hands-on impact assessment allowing stakeholders to re-allocate commodities on a digital MapTable, (2) quantification and geo-referencing of up to 10 commodity types at the scale of 1 hectare-grids, (3) the analysis of self-sufficiency based on a regional concept consisting of four metropolitan food zones, (4) landscape-ecological allocation rules to base land use decisions on sustainable principles, and (5) European data such as EFSA, LANMAP, HSMU and CORINE Land Cover to allow future top-down tool applications for all metropolitan regions throughout the EU.

The MAPS and MFP tools are accompanied by the economic assessment of the Metropolitan Economic Food Balance (MEFB) tool, which is aimed at understanding how economic dimensions of agricultural systems are linked one another into a complex structure. Based on the calculation of quantitative elements expressing the relation between food production and consumption at staple food level, such an approach reveals the chances of getting them closer and serves as a tool for the assessment of performances of regional agro-food systems. The Sustainability Food Impact Assessment (SFIA) tool complements the family of food assessment tools. Here the focus is on impacts of different food innovation within the different dimensions of sustainability. Therefore 15 different impact fields have been taken into consideration.

The ED Tools and models represent somewhat the core of the FOODMETRES project, as it is the **objective** to provide access to a set of complementary instruments, which help academic users, stakeholders and decision-makers to analyze spatial and sustainability consequences of food demand and supply as well as of innovations in the food chain, connecting both.

Pathways are provided to the four tools and models developed and applied in the case study regions of FOODMETRES: (i) Metropolitan Economic Food Balance (MEFB) (N=5), (ii) Metropolitan Area Profiles and Scenario (MAPS) (N=5), (iii) Metropolitan Food Planner (MFP) (N=5), and (iv) Sustainability Food Impact Assessment (SFIA) (N=4).

6.4 ED4 Policy and Research

The **objective** of **ED4 Policy and Research** is to provide access to synthesized information from FOODMETRES research activities for academic, business and policy end-users. Therefore the knowledge portal displays policy briefs on (i) Sustainability and Resilience, (ii) Innovation; (iii) Business Models, and (iv) Planning and Governance, which also represent the **pathways**.

7 Portal Testing and Feedback

Once developed the KB Platform will need to be tested, we propose a multi-staged approach to this task:

1) Each FOODMETRES partner will be asked to nominate a stakeholder (i.e. Institution staff or stakeholders) to review the site, test links, pursue intended pathways and provide feedback. (Feedback from KB Sphere 2 partners).
2) Soft launch at the Consortium meeting (May 2015) – partners will be introduced to the site, Ingo Zasada will provide a 'virtual walk through' the platform and will encourage partners to provide feedback in the facilitated session (Feedback from KB Sphere 1 partners).
3) Feedback will be sought from external parties who attend the Final dissemination event in Brussels – '*Towards a Territorial Approach for European Food Security*' September 2015. Questions and comments will be invited from the audience after the presentation of the KB Portal. (Feedback from KB Sphere 3 partners).

All feedback is collated by Ucov/IFR and will be fed back to relevant partners to ensure amendments and alterations can be accommodated and actioned prior to the dissemination of the final portal at the end of the project.

8 References

Canadian Health System Research Foundation (2003). The Theory and Practice of Knowledge Brokerage in Canada's Health System. A report based on a CHSRF national consultation and a literature review. Ottawa, 2003.

Karner, S., Rohracher, H., Bock, B., Hoekstra, F., Moschitz, H. (2011). Knowledge Brokerage in Communities of Practice. Synthesis Report on literature review. [http://www.foodlinkscommunity.net/fileadmin/documents/Common-contents/publications/D2.1_Synthesis_report_DRAFT_uploadHP_March2012.pdf]

9 Report History

17.06.2014	First proposition paper developed (Draft 2_7.7.14 / Draft 3_8.7.14) (LV, IFR)
25.09.2014	KB Platform presentation at Consortium Meeting (LV, IFR)
16.12.2014	KB Working Paper developed (Draft 2_18.12.14) (LV, IFR & IZ, ZALF)
13.15.2015	Version 1 of KB Platform specification developed (LV, IFR, UCOV)
20.01.2015	Version 2 of KB Platform specification after Skypes merging 5.2 documentation (IZ, ZALF) and Design Proposal (DW) (LV, IFR)
26.02.2015	Version 3, Draft: incorporating IZ concept paper on Pathways and Entrance Doors, further work to embedding knowledge brokerage tasks (LV, IFR, UCOV)
20.08.2015	Version 4, Draft: incorporating conceptual information on the KP plus detail information on the content (IZ, ZALF)
15.09.2015	Version 5, Draft: additional information in relation to KB feedback processes and changes made to section 6.1 User functionality. (LV, IFR)
22.09.2015	Final Version: References, content coherence, format and language checking (IZ, ZALF)
28.09.2015	Final Version: Contextual information added and linkages to deliverable 5.2. Draft specifications added to annex. (LV, IFR)

10 Annex

10.1 Knowledge Brokerage Platform Position Paper – June 2014

Online Knowledge Brokerage Platform: Consultation & Development (Draft 3 – Full paper)

Background

Within Work Package 6, Task 6.3 is dedicated to the development of a specification for an Online Knowledge Brokerage Platform.

According to the Work Package Description;

"IFR/UCOV will provide a specification to Alterra (P1) for the design of an online Knowledge Brokerage platform. This will be accessed via a portal hosted within the FOODMETRES website maintained by the Project Coordinator". (WP Description, pg 22 of 32).

Critical to Task 6.3, will be deciding what information the FOODMETRES online Knowledge Brokerage platform must, should and could hold on the various elements of the FOODMETRES project. To do this a period of consultation is required.

Purpose of this paper

The design of any portal requires significant effort in the planning, design and execution stages. The FOODMETRES portal will only be fit for purpose if it meets the requirements of both the project partners and stakeholders; recognizing that this is likely to be the remaining representation of the project, once the research project has concluded. Further on from this, the portal will be utilized by interested parties not involved in FOODMETRES but who share interests aligned with the focus of the research. **Given that the portal must represent FOODMETRES partners but also speak to a wider audience, it is critical that all project partners are engaged in the decisions about structure, operation and contents of the portal.** Furthermore, it is of paramount importance that this consultation starts well in advance of the end of the FOODMETRES project.

Therefore this paper, outlines the proposed approach to the 'Portal consultation' and explains how this process will be undertaken with partners and stakeholders. We have endeavoured to draw upon best practice and leading examples of portals, but if you know of other examples, sites or have experience of other processes then please do not hesitate to get in touch with us.

As we see it, the approach will be split into two stages:

Stage 1 – What is the vision for the FOODMETRES online knowledge portal? (via Group Consultation)

Stage 2 – What must the portal include? (Designing the specification)

In addition to this full paper, there is an abridged version which will focus on the actions and processes that will be followed in the consultation and is designed for partners who are less interested in the background research and rationale presented in this paper, but need to understand the outline and overview of the process.

Any questions, comments or suggestions in relation to this paper should be directed to either Laura Venn (laura.venn@ifresearch.co.uk) or Moya Kneafsey (moya.kneafsey@coventry.ac.uk).

Stage 1

To develop an effective portal there must be a shared vision. Stage 1 is focused solely on providing information to partners and gathering feedback to enable us to develop a shared vision.

UCOV/IFR will undertake three main activities in Stage 1:

1. Conduct background (market) research on what portals are already available to determine where the FOODMETRES one will fit, where potential collaborations are possible and draw upon existing best practice and lessons learned;
2. Facilitate a Question and Answer session (Q&A) at the September consortium meeting asking partners to consider information provided on other portals and what FOODMETRES members want from their KB portal; and
3. Develop a shared vision statement for the FOODMETRES online knowledge brokerage portal.

Background research on knowledge portals

to be added – reviews of LIAISE-KIT, and insight from discussions with Climate KIC, IUFN, information on feedingknowledge portal, knowledge4food, example Balint has been working on (Moya to provide details)

Q & A - what do we want from our foodmetres knowledge brokerage portal?

The consultation process is dedicated to thinking about this question and gathering partners' thoughts and feedback so that we can create a specification which will meet partners' requirements. We have made the following assumptions, but are keen to hear and discuss others' views during the course of this consultation:

- The portal should showcase the best of FOODMETRES
- Provide further insight, technical information and findings from each work package
- Signpost visitors to other useful information sources

- Offer interested parties the opportunity to contact and engage with the members of FOODMETRES
- Connect with other KB platforms, portals and wikis (i.e. LIAISE Kit)
- Provide a concise representation of the FOODMETRES project

Each of these aspirations (bullets above) needs to be discussed and considered in the consultation so that we can give Alterra a clear picture of what the FOODMETRES online knowledge brokerage platform should do. To do this we intend to hold an initial discussion on the portal with partners at the 3rd Consortium Meeting in London, September 2014.

A brief Q&A session will be scheduled on the agenda to ask partners (this is an indicative list of questions, TBC closer to the time):

- How does the KB portal differ from the FOODMETRES website?
- What services should the KB portal offer visitors (i.e. a library, community platform, linking and signposting)?
- How would you like information to be presented?*
- What content would be needed?*
- What kind of search function would be needed?*
- What kind of input would you be willing to give?*

*Questions adapted from the LIASE Project consultation.

It is also our intention to discuss potential opportunities for collaboration with existing portals, for example, LIAISE kit (www.liaise-kit.eu), IUFN and Climate KIC.

Add any information from discussions DW held with experts.

Developing a shared vision

To be added – our plans for creating a vision at the London consortium meeting.

Need to consider how we manage expectations – what is possible / what is not possible within the confines of the project

After the Consortium meeting – UCOV/IFR will develop the shared vision and discuss how is best to proceed in terms of collaborating with other portals and capturing needs in terms of our own portal.

Stage 2

Once the vision is set, partners can then be consulted on what the contents of the portal should be?

The approach proposed below is seen at this stage as one possible option. However, until the vision is created and more is understood about how the FOODMETRES portal will interact with other portals and *platforms no final decision will be made about whether to develop the specification using Agile and User Stories.*

Capturing needs and requirements using agile

Software development has a long and varied literature on which to draw upon. The favoured approach for the development of the FOODMETRES portal comes from the process called Agile. Here, we give a brief overview of our understanding and point to further information should partners be interested in accessing further detail. IFR/UCOV are not software developers, and we will of course defer to ALTERRA's software development preferences, but we propose to use some of the elements of the AGILE process to capture requirements and needs (in the consultation phase at least).

What is Agile?

Agile is an umbrella term used to describe a general approach to software development. Though there are many agile incarnations (such as Extreme Programming, Adaptive System Development, DSDM, Feature Driven Development, Kanban, Crystal) all agile methods, including the Scrum agile process, emphasize teamwork, frequent deliveries of working software, close customer collaboration, and the ability to respond quickly to change.

What is SCRUM?

SCRUM is the framework that software development teams use for managing the process of software development. Unlike traditional designs, where complete detailed descriptions are designed of a tool, SCRUM relies on the software team to know best how to solve the problem that they are presented with and thereby gives them the power to organize the design of the tool.

It first appeared in a paper in the Harvard Business Review in 1986 and the SCRUM Agile process was first deployed by software teams in 1993. A survey in 2009 by SearchSoftwareQuality revealed that 56% of organizations were using an Agile process in at least some of their projects.

Clearly, it is not the job of UCOV/IFR to develop the software (hence the mandate to pass over the specification to Alterra who have the manpower and capacity). Whether ALTERRA software developers use a SCRUM methodology to complete the task will be up to them. However, UCOV and IFR are responsible for developing the specification and most poignantly for making sure this brief matches the needs and desires of the FOODMETRES project and respective teams. **In light of our focus on Knowledge Brokerage and the need to consult partners on the portal we feel that the SCRUM Agile process (from the User perspective, the product backlog) provides us**

with a workable framework for capturing our needs, which we (IFR/UCOV) can then collate and usefully represent to ALTERRA.

Why Use Agile and Scrum?

Given that the FOODMETRES researchers are not programmers or software developers, we need a straight-forward and self-explanatory set of activities and exercises that will lead us to gathering the necessary information in order to design a specification for a FOODMETRES project portal. We believe that the SCRUM Agile processes will help us to be inclusive and will be relatively straightforward to deploy and execute.

What will the SCRUM Agile process involve for partners?

In development terms, we will be focusing on developing the product backlog. This is the complete list of functionality that needs to be added to the portal. IFR/UCOV will act as the product owner and shall prioritise these features based on the responses to consultations held with partners.

The most popular and successful way to create a product backlog using SCRUM methodology is to populate it with user stories, which are short descriptions of functionality described from the perspective of the user or customer.

A typical example of a user story could be:

"As a shopper, I can review the items in my shopping cart before checking out so that I can see what I've already selected."

All user stories, follow the same format: 'As a…., I want…., so that…'

An example for FOODMETRES might be:

As a researcher, I want to access reports from other case studies, so that I can share with my partners'

IFR/UCOV will consult with partners to create as many user stories as possible so that we can understand the needs of partners and the ways in which they will want to use, engage and interact with the portal. These user stories will be captured over a period of months and via different means (i.e. a general email call, discussion at the project consortium meeting, during Skype calls and at the second participatory workshop). A tentative timeline has been suggested in the following section of this paper.

Once a number of stories have been collated, these will be organized and prioritized and shared with Alterra in the form of a product backlog (an example Product Backlog has been provided in the Annex to this paper) from which they can base their development of the portal.

Further detail and information is available:

Crispin, L. and Gregory, J. (2009) Agile Testing: A practical guide for testers and agile teams, Addison- Wesley, Pearson Education Inc, Boston.

www.mountaingoatsoftware.com

https://agilemethodology.org

www.allaboutagile.com

www.scrumalliance.org

Developing User Stories

User stories are short, simple descriptions of a feature told from the perspective of the person who desires the new capability, usually a user or customer of the system. They typically follow a simple template:

As a <type of user>, I want <some goal> so that <some reason>.

User stories are often written on index cards or sticky notes, stored in a shoe box, and arranged on walls or tables to facilitate planning and discussion. As such, they strongly shift the focus from writing about features to discussing them. In fact, these discussions are more important than whatever text is written.

Stories can be in any format, so long as the conversations surrounding the stories occur. User stories come in different sizes. A small story, called simply a "user story," is one that is well understood and can be implemented within a sprint (a process the development team undertake).

Large user stories are typically referred to as epics. There's no magic threshold at which we call a particular story an epic. It just means "big user story." Epics generally take more than one or two sprints to develop and test. They are usually broad in scope, short on details, and will commonly need to be split into multiple, smaller stories before the team can work on them.

Who should write the User Stories and when?

Anyone on the project can write a User Story, given our focus on Knowledge brokerage within, across and amongst out three spheres (see D6.1 for a full explanation) we consider that representatives from all KB spheres should be encouraged to write user stories.

Also, note that who writes a user story is far less important than who is involved in the discussions of it. In other words, if a story is already written by another FOODMETRES colleague it is not necessary for everyone who agrees/supports it to write it again. We want to avoid duplicating stories, and partners will have the opportunity to discuss and rank stories in order of importance in the consortium meeting.

User stories are written throughout the agile project. Usually a story-writing workshop is held near the start of the agile project. Everyone on the team participates with the goal of creating a product backlog that fully describes the functionality to be added over the course of the project or a three- to six-month release cycle within it. Some of these agile user stories will undoubtedly be epics. Epics will later be decomposed into smaller stories that fit more readily into a single iteration. Additionally, new stories can be written and added to the product backlog at any time and by anyone.

FOR CONSIDERATION: HOW TO MAKE THIS WHOLE PROCESS MORE PRAGMATIC AND MANAGEABLE: following the AGILE process to the letter could mean an unwieldy, over complicated and time-consuming process (i.e. asking all FM partners to contribute user stories), should we therefore, have a smaller 'representative' working party developing user stories (i.e. KB champions, coordinator, SME rep, case study partners rep) pre-prepared stories could then be presented and discussed with all partners (LIAISE ran similar focus groups), gaps identified (opportunity for partners to add missed stories via post it board) and a ranking activity done (MOSCOW) to create the backlog jointly.

If this approach was adopted the following sections of this paper would all still apply; just run with a smaller group of partners.

Submission of user stories

It is possible to compile user stories in both a hi-tech and lo-tech way and it is the intention of the WP6 team to provide as many opportunities for people to engage with this process of writing user stories as part of the portal consultation as possible.

UCOV/IFR will develop a set of 'example' user stories (which may or may not be kept by the FOODMETRES project) to help give people a flavour of the sort of thing we are looking for.

UCOV/IFR could, if required, provide a 'web portal skype' to talk KB champions through the process so that they can explain the process to their teams.

Collecting stories

The hi-tech option which is preferred is to use a free online project management portal called Trello.

Advantages: online, easily accessible – free to register, can be populated by people when it suits them, allows stories to be gathered over a period of months Disadvantages: people may not be familiar with it, organiser must pay to share information.

Add slides

The lo-tech option which may be of interest and/or use to certain partners in the FOODMETRES consortium is to use an excel spreadsheet (see Figure xx)

Figure XX. An example User Stories spreadsheet created in Excel.

ID	Theme	As a/an	I want to...	so that...	Notes	Priority	Status
2	Game	moderator	create a new game by entering a name and an optional description	I can start inviting estimators	If games cannot be saved and returned to, the description is unnecessary	Required	done
2	Game	moderator	invite estimators by giving them a url where they can access the game	we can start the game	The url should be formatted so that it's easy to give it by phone.		done
5	Game	estimator	join a game by entering my name on the page I received the url for	I can participate			done
6	Game	moderator	start a round by entering an item in a single multi-line text field	we can estimate it			done
8	Game	estimator	see the item we're estimating	I know what I'm giving an estimate for			done
~~40~~	~~Game~~	~~participant~~	~~always have the cards in the same order across multiple draws~~	~~it's easy to compare estimates~~	-	Replaced with A08 because I didn't want the story to talk about "the same order" as that might be a UI implementation detail	~~todo~~
35	Non-functional	user	have the application respond quickly to my actions	I don't get bored			done
36	Non-functional	user	have nice error pages when something goes wrong	I can trust the system and it's developers			done
A11	Non-functional	Researcher	results to be stored in a non-identifiable way	I can study the data to see things like whether estimates converged around the first opinion given by "estimator A" for example	No names or story text should be stored but we should store each card of each hand, know who played it, and know the final accepted estimate		
A05	Game	moderator	edit an item in the list of items to be estimated	so that I can make it better reflect the team's understanding of the item			
22	Archive	moderator	export a transcript of a game as a CSV file	I can further process the stories and estimates	Exported file should be directly importable back into the system.		done

A similar spreadsheet could be created and stored on MediaFire for partners who prefer not to use Trello.

Advantages: low tech, easy for people to use, Disadvantages: data may not be saved to the latest version, only one user can alter at a time, requires very clear version control

Whilst it is important that we accommodate all partners (i.e. use hi and lo-tech options in the consultation) we want to avoid having two different lists of user stories running, as such we propose to use the following approach and methods in the consultation: a short window for submission to Trello (1 month) and uploading stories via Media Fire excelsheet for the month after the Trello account has been closed.

Refining and Prioritising user stories

During the consultation process partners must keep in mind what the online knowledge brokerage platform is being designed for, and as such stories must be developed which represent and do justice to the work of the various WPs within the FOODMETRES project.

As such, we intend to ask partners to provide user stories in relation to a number of FOODMETRES products which are central to the various work packages and which we should, theoretically, be able to share information and knowledge on to other interested parties.

A tentative list of these products (i.e. themes for user stories to be organised into or based upon). Other suggestions will of course be considered by the WP6 team and discussed with partners during the consultation (namely at the consortium meeting):

- Scenarios
- Storylines
- Innovation domains
- Tools - Metropolitan Footprint tool, Sustainability Impact Assessment
- Knowledge brokerage

It may also be worthwhile considering segments in other portals with which we wish to collaborate and share knowledge with (i.e. LIAISE, IUFN, Climate KIC). Aligning information requirements at this stage could assist in making sure partners are not duplicating effort, or having to write the same information twice but in accordance with different layouts/requirements across portals etc

Refining stories

Using Trello – the process will be relatively easy to manage……….

Providing opportunities for people to discuss the approach, stories submitted, etc – perhaps via Skype calls

Using the paper based excel method – the pinboard and additional stories will be organised under headings by the UCOV/IFR team on the day.

Prioritising stories

TO be added – details of how we intend to prioritise stories at the consortium meeting

MOSCOW activity task………

Make them DEEP

Roman Pichler, author of "*Agile Product Management with Scrum: Creating Products That Customers Love*" and I use the acronym DEEP to summarize key attributes of a good product backlog:

- **Detailed Appropriately.** User stories on the product backlog that will be done soon need to be sufficiently well understood that they can be completed in the coming sprint. Stories that will not be developed for awhile should be described with less detail.
- **Estimated.** The product backlog is more than a list of all work to be done; it is also a useful planning tool. Because items further down the backlog are not as well understood (yet), the estimates associated with them will be less precise than estimates given items at the top.
- **Emergent.** A product backlog is not static. It will change over time. As more is learned, user stories on the product backlog will be added, removed, or reprioritized.
- **Prioritized.** The product backlog should be sorted with the most valuable items at the top and the least valuable at the bottom. By always working in priority order, the team is able to maximize the value of the product or system being developed.

Use themes in the Backlog to combine similar user stories.

Developing acceptance criteria

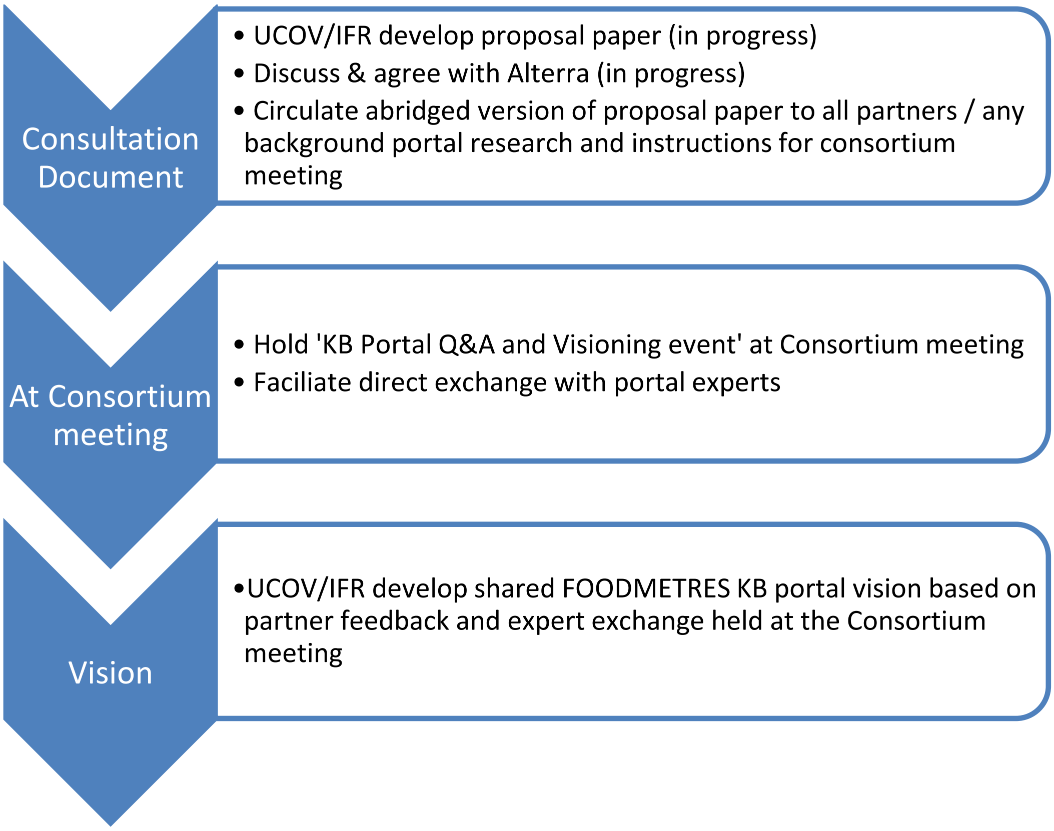
to be completed once user stories have been created

Portal consultation proposals (UCOV/IFR)

As per the Work Package Description (6.3), IFR/UCOV are responsible for providing a knowledge brokerage portal specification to Alterra and in order to do so a broad user/partner consultation must be carried out in order to ensure that the final specification will meet the needs of partners.

We propose the following consultation process:

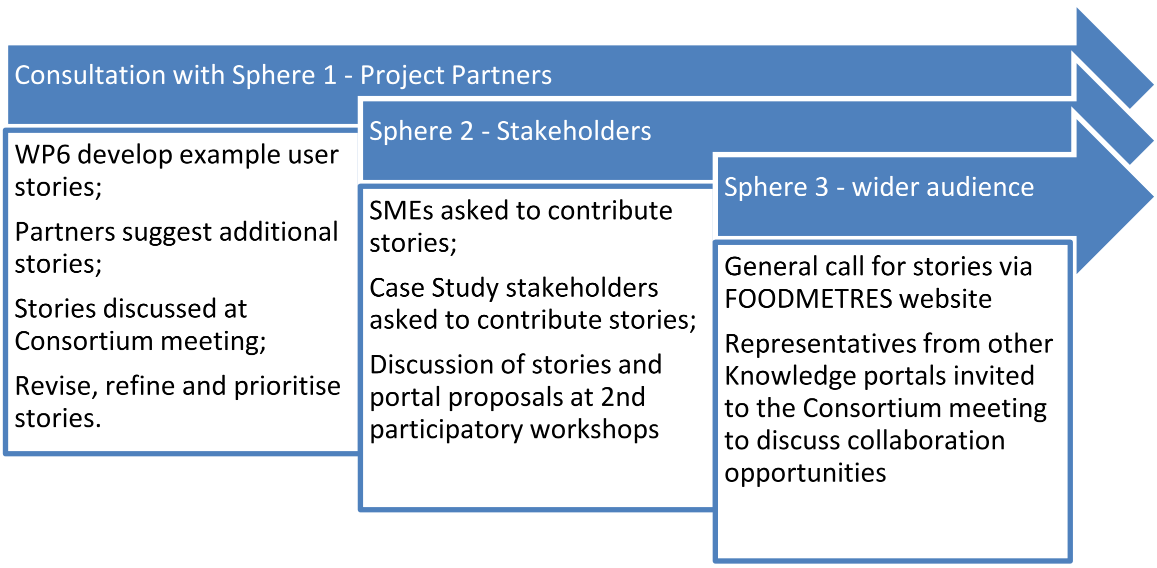
Stage 1:



The exact process for Stage 2 of the consultation will be developed after the Consortium meeting.

Ensuring an inclusive consultation

Consistent with the different spheres of Knowledge Brokerage present within the FOODMETRES project, we envisage the process for collating and generating information to be undertaken as follows below:



Timeline

Lead Partner	Action	Tentative Timeline
IFR (UCOV)	Development of Portal proposal paper and first iteration of 'user' profiles	By late-June 2014 COMPLETED
IFR (UCOV/ALTERRA)	Share proposal paper with Alterra & Coordinator / organize inception call	Late June 2014 COMPLETED
IFR (UCOV/ALTERRA)	Inception call with Alterra to discuss intended approach, proposals of process, any preferred methods or styles of communication/storage of user stories, broad timescales, project contacts etc	Late June / Early July 2014 HELD 8.7.14
IFR (UCOV)	Revise proposal paper in line with discussion held with Alterra	Early July 2014 COMPLETED
IFR (UCOV)	Conduct background/market research on existing knowledge portals and platforms	July / August / September 2014
IFR/UCOV/ALTERRA	Liaise with knowledge portal experts	September 2014
IFR/UCOV	Design and run Q&A and visioning session at London Consortium meeting	September 2014
IFR/UCOV/ALTERRA	Confirm plans for 2nd stage of portal consultation process	October 2014
IFR (UCOV)	Develop some example user stories, add to the proposal paper. Set up FOODMETRES Trello account	tbc
IFR (UCOV, ALL KB champions and CS leaders)	Share paper with all KB champions and CS leaders, ask for them to submit user stories Trello Skype call (if required)	tbc
UCOV (IFR)	Review user stories and develop acceptance criteria	tbc
UCOV (IFR)	Consult partners on acceptance criteria	tbc
UCOV (IFR)	Finalise Product Backlog and forward to Alterra	January 2015

Annexes

<u>A User Story structure:</u>

'As a ……..'

'I want to…….'

'So that…..'

Acceptance criteria relates to the measures (i.e. how will we determine whether something has been done or not)

<u>Example of a possible User Story</u>

As a Researcher on the FOODMETRES project

I want to access reports written by partners in other countries

So that I can share these with my colleagues

Acceptance criteria: be able to log in and access the reports over the internet and open/download them in either word or PDF format.

Product Backlog Example

The following product backlog example was written for the Scrum Alliance website in 2006. This product backlog lists everything that the product owner and Scrum team feels should be included in the software they are developing in a Scrum environment.

Profiles

- As a site member, I want to describe myself on my own page in a semi-structured way. That is, I can fill in predefined fields, but also have room for a free-text field or two. (It would be nice to let this free text be HTML or similar.)
- As a site member, I can fill out an application to become a Practitioner.
- As a Practitioner, I want my profile page to include additional details about me (i.e., some of the
- answers to my Practitioner application).
- As a site member, I can fill out an application to become a Trainer.
- As a Trainer, I want my profile page to include additional details about me (i.e., some of the
- answers to my Trainer application).
- As a Practitioner or Trainer, when I provide content to the site I want a small graphic associated
- with the content indicating I'm a Practitioner or Trainer. (For example, Amazon's "Top 500
- Reviewers" approach.)
- As a trainer, I want my profile to list my upcoming classes and include a link to a detailed page
- about each.
- As a site member, I can view the profiles of other members.
- As a site member, I can search for profiles based on a few fields (class attended, location, name).
- As a site member, I can mark my profile as private in which case only my name will appear.
- As a site member, I can mark my email address as private even if the rest of my profile is not.
- As a site member, I can send an email to any member via a form.
- As a site administrator, I can read practicing and training applications and approve or reject
- them.
- As a site administrator, I can edit any site member profile.

News

- As a site visitor, I can read current news on the home page.
- As a site visitor, I can access old news that is no longer on the home page.
- As a site visitor, I can email news items to the editor. (Note: this could just be an email link to
- the editor.)
- As a site a site editor, I can set the following dates on a news item: Start Publishing Date, Old
- News Date, Stop Publishing Date. These dates refer to the date an item becomes visible on the site (perhaps next Monday), the date it stops appearing on the home page, and the date it is removed from the site (which may be never).
- As a site member, I can subscribe to an RSS feed of news (and events? Or are they separate?).
- As a site editor, I can assign priority numbers to news items. Items are displayed on the front page based on priority.

Courses and Events

- As a site visitor, I can see a list of all upcoming “Certification Courses.” I can page through them if there are a lot.
- As a site visitor, I can see a list of all upcoming “Other Courses” (non-certification courses). I can page through them if necessary.
- As a site visitor, I can see a list of all upcoming “Events.” (Events are things such as the Scrum Gathering, conferences, free seminars, etc.)
- As a trainer, I can create a new course or event. This includes the following information: name, description (HTML), trainer names (multiple selection from a list), start date, end date, venue name (HTML) and address, contact name, contact phone, contact email, a link for more information, and a link to register. For a certification course the name of the class is a dropdown list; for others, it is free text.
- As a trainer, when I create an Other Course or Event, I am charged a listing fee for that activity. (Note: We’ll need this to tie into credit card processing.)
- As a site administrator, I can create an Other Course (?) or Event that is not charged a listing fee. This is so that the Scrum Alliance doesn’t charge itself for Scrum Gatherings that it puts on.
- As a site administrator, I can set the listing fee per Other Course or Event.
- As a trainer, I can update one of my existing courses or events.
- As a trainer, I can delete one of my courses or events.
- As a trainer, I can copy one of my courses or events so that I can create a new one. When
- copying it I am asked for the date(s) of the new course or event.
- As a site admin, I can delete any course or event.
- As a site editor, I can update any course or event.
- As a trainer, admin, or editor, I can turn a course into an event or an event into a course (in case it was entered in the wrong category). (Note: making something a Certification Course will probably require selecting the name of the course from the pre-approved list.)
- As a site visitor, I have an advanced search option that lets me fill in a form of search criteria
- (country, state, trainer name, date range, word in description, etc.).
- As a site visitor, when I’m viewing a course I can click on the trainer’s name and be taken to the trainer’s profile.
- As a site visitor, I can subscribe to an RSS feed of upcoming courses and events.

FAQs

- As a site visitor, I can read FAQs.
- As a site editor, I can maintain an FAQ section.
- As a site member, I can do a full-text search of the FAQs. (Maybe we want this for any site visitor?)

Resource

- As a site member, I can download the latest training material and methodology PDFs.
- As a visitor, I can download presentations, PDFs, etc. on Scrum that I can use.
- ....more needed here.................

Jobs

- As a site member (?), I can scroll through a listing of jobs. (There won’t be enough at first to justify search fields.)

- As someone who wants to hire, I can post a "help wanted ad".
- As a site admin, I need to approve each help wanted ad before it gets to the site.
- As a site admin, I am emailed whenever a job is submitted (so that I am aware of it and can decide if I want to post it).
- As a site member, I can subscribe to an RSS feed of jobs available.
- As a site admin, I can edit and delete help wanted ads.
- As a site admin, I want jobs to stop publishing on the site 30 days after being posted. (Note: 30 days doesn't need to be configurable at this point. Hardcoding is fine for now.)
- As someone who wants to hire, I want to be able to extend an ad for another 30 days (repeatedly) by visiting the site and updating the posting. (Note, I can't update it 10 times today and extend the posting 300 days today.)
- As someone who has posted an ad that is about to expire, seven days before it expires I want to be emailed a reminder so that I can go extend the ad. (Note: This means the ad could have an expiration date 37 days into the future, which is fine.)

Articles

- As a site visitor, I want to read a new article on the front page about once a week.
- As the site editor, I can include a teaser with each article. The teaser shows up on the front page for all to read.
- As a site member who has read a teaser on the front page, I want to read the entire article. (Note: We want any site visitor to read articles for now.)
- As the site editor, I can add an article to the site.
- As a site editor, I can set start publishing dates (when teaser appears on front page), old article date (when it disappears from home page), and stop publishing dates (when it's removed from site, if ever) for articles.
- As a site editor, I want to be able to designate whether or not an article (or for that matter any piece of info) ever makes the home page... some things will not.
- As the site editor, I have pretty good control over how the article looks (include images and captions, for example).
- As a site visitor, I want the link from the article teaser to take me directly to the body of the article... not to another teaser setup.
- As a site editor, I want to be able to indicate whether an article is publicly available or for members only.
- As a site visitor, I want to be able to read some of your articles.
- As a site member, I want to have full access to all articles.
- As a site visitor, I can do a full-text search of article body, title, and author name.
- As a site visitor, I can subscribe to an RSS feed of articles. (Teasers only?)
- As a site visitor, I can post comments about articles so that others can read them.

Home Page

- As a site editor, I want to have a prominent area on the home page where I can put special announcements, not necessarily news or articles.
- As a site editor, I'd like to have some flexibility as to where things appear to accommodate different types of content.
- As a site member, the upcoming courses are what I want visitors to notice.
- As a site visitor, I want to see new content when I come to the site.
- As a site visitor, I want to have articles that interest me and are easy to get to.
- As a site editor, I have ideas on how I want the home page to look and feel.
- As a site visitor, I need to know as soon as I visit what on earth Scrum is, and why it needs an alliance.

- As a site visitor, I want to know as I glance around the home page what on earth a CSM is and why I'd want to be one.
- As a site visitor, I want to be able to get back to the home page quickly and easily.
- As a site visitor, I want to see a list of the most popular items on the site. (Note: Not everything has to be considered. For example, we don't need to know the most popular profile but it would be useful to a have a "most popular" box that listed the most popular articles, news items, or etc.)

Ratings

- As someone who successfully completed a Certification Course (becoming a Certified ScrumMaster or Certified Product Owner), I am emailed a link to a survey about the course and instructor.
- As a trainer, I want to be assured that no one can submit the same answers multiple time and skew my results.
- As a trainer, I am notified about the results of surveys about my classes. (Questions: After each survey? After a set period of time? Does the trainer get an email or just know to go to the site?)
- As a site admin, I can see the results for each trainer and averages for the class (for all trainers).
- As a site visitor who is considering attending a certification course, I want to see a trainer's rating (either for that course or for all of his or her certification courses combined).
- As a trainer, I want my rating to show up on my profile page.

What Is Scrum?

- As a site visitor, I want there to be a section of the website that teaches me the basics of what Scrum is.
- As a site editor, I can create the content of the What Is Scrum section.

Registry

- As a site visitor, I can view lists on the site of all Certified ScrumMasters, Practitioners, Trainers, and Certified Product Owners. (The CSM list has over 5,000 names so a letter-based pagination approach is needed.)
- As a CSM, Practitioner, or Certified Product Owner, I can have my name listed in the registry without becoming a member of the site. (For example, I take a certification class but never register or let my membership lapse.)
- As a trainer who has finished teaching a Certification class, I can load an Excel file (first name, last name, email) into the site. I am prompted for the trainer names (I may not have trained alone), certification date, and type of certification (i.e., CSM or CPO). The names are loaded into a pending state and not yet added to the registry. (Note: We could have this charge $50 per person right then.)
- As a site admin, I can view all classes in a pending state.
- As a site admin who has received proof of payment from a trainer, I can move people in his or her class from a pending state to the registry.
- As a new Certified ScrumMaster or Certified Product Owner, once my name has been loaded to the registry I am sent an email welcoming me to the Scrum Alliance and containing instructions on how to register / activate my membership.
- As a site editor, I can edit the content of the email automatically sent to new Certified ScrumMasters and Product Owners.

Membership

- As a company, I can join the Scrum Alliance by paying a corporate membership fee. This will include uploading items related to corporate membership (e.g., company description, a logo of size x by y).
- As a corporate sponsor, my logo is displayed on a “corporate sponsors” page just like at http://www.agilealliance.org/portal_url/corporatemembers. (Note that the display order on that page is random.)
- As a corporate sponsor I want my logo to randomly appear on the home page. (That is, it rotates among other corporate sponsors.)
- As a CSM or CPO who has been approved for Practitioner status (by a site admin reading my submission), I am charged a fee.
- As someone about to become a trainer, I can pay an annual fee.
- As a site administrator, I can set the annual fees for members, Practitioners and Trainers.
- As someone whose membership (of any type) is about to expire, I am sent a reminder and a link through which I can renew. (Note: Think about overlapping memberships and prorating.)
- As a member with short-term memory problems, I can have the system email me a new password or a password reminder, possibly my username (unless we use email for that), and so on.

For Trainers Only

- As a trainer, I can read information of relevance only to trainers.
- As a site editor, I can post information in a trainers-only section.

SCRUM Methodology

Must have

Should have

Could have

Wont have

These are known as the MOSCOW rating

10.2 KB Platform Working Paper -December 2014

The purpose of this working paper is to explain the process in developing the specification for the Knowledge Brokerage Portal as specified in the FOODMETRES Description of Work.

What is Task 6.3?

Task 6.3 requires the development of a specification for a FOODMETRES knowledge brokerage portal:

- *"IFR/UCOV will provide a specification to Alterra for the design of an online Knowledge Brokerage Platform. This will be accessed via a portal hosted on the FOODMETRES website maintained by the Project Coordinator" (Task 6.3)*

The team responsible for Work Package 6 have broken this deliverable down into 2 stages; Consultation and Specification Development.

Consultation Stage

The consultation stage was executed at the London Consortium Meeting (September 2014) and involved a presentation given by Laura Venn of IFR relating to some preliminary background research on knowledge portals (available to project participants on MediaFire) and a discussion involving all FOODMETRES partners in respect of what partners' wanted the portal to include.

During the two-day meeting, a flipchart was made available for partners to record their views and comments in relation to what content they thought should be made available on the FOODMETRES Knowledge Brokerage Portal. Below is a list of comments and thoughts received during the meeting:

What should be on the FOODMETRES Portal?

- Metropolitan Footprint Tool
- Sustainability Impact Assessment Tool and Results
- Project Videos (Kick Off, Consortium, case studies)
- Conceptual information – project glossary, terms of reference, concepts
- Innovation storylines
- Short Evidence cases – 1 page summaries from case studies of evidence/experience for wider audience

Specification Development Stage

Having been given a clear steer from partners as to what information they want to see made publicly available on the Knowledge Brokerage Portal, the Work Package 6 team can start to consult with partners involved in developing these tools (e.g SIA, MFT) to determine what type of information, in what format, and how it could best be presented on the portal. The purpose of gathering this information is so that a clear picture can be given to the portal designers at Alterra.

Below is a first iteration of the information known, Skype meetings will be held with relevant partners to fill in gaps and provide other relevant information.

TOOL / CONTENT	Dynamic or Static?*	What format?**	Specific software needed?	Is the information available now?	Skype required? With?
MFT					Yes, Ingo
SIA			Database		Yes, Annette
Project Videos	Static		No	Some Yes	No
Conceptual Information	Static	Word, PDF	No	Some, Yes	No
Innovation Storylines	Static	Word, PDF	No	Yes	No
Short evidence cases	Static	Word, PDF, Publisher?	No	Not yet (March 15)	No
Brochure	Static	PDF/Publisher	No	No yet (March 15)	No
Website, Graphical User Interface	-	-	Linux, Ubuntu, HTTP server, MySQL database	yes	Yes, UCov, Alterra, ZALF for technical implementation of portal

*Dynamic or Static? - by this we mean will the information on the site be interactive, for instance, someone could enter data and retrieve an output or calculation?

**What format? – for example, will the information provided be in tables, word, pdfs, maps etc?

Once the relevant Skypes and discussions have been held it is the intention of the WP6 team to draft a Knowledge Brokerage Portal specification which will contain relevant information relating to the following headings:

1. Portal Vision
2. Portal Location and Access arrangements
3. Portal Sitemap
4. Notes from Skypes re: content
5. Contact information for authors/creators of content

Subject to Skypes being held in January 2015, our intention is to complete the KB Portal specification by January 30st 2015. Any questions, please contact Laura Venn (laura.venn@ifresearch.co.uk).

10.3 Portal Specification (Draft) - March 2015

Starting point: In the FOODMETRES project, the generated knowledge and information is quite different in terms of in-depth view and comprehensiveness: While there are specific foci on some short food supply chain types (e.g. urban agriculture) or impact areas (e.g. health or logistics), there is also a comprehensive elaboration with other chain types, impacts or case study results. Further, the different topics are partly interlinked, some are more fragmented and isolated some are more integrative

Concept: To have a common approach to this heterogeneity of FOODMETRES knowledge, a guided presentation and access (via "Entrance Doors" and "Pathways") would be a suitable way of communication

"Entrance Doors" and **"Pathways"** would lead to individual **factsheets** (webpages), which make use of the various FOODMETRES outputs, such as qualitative portraits of specific examples of SFSC, to the SIA and the MFT tool, to reports, etc.; they make all use of already existing documents from the project

Each output can also be accessed through different pathways and entrance doors (e.g. a portrait of urban gardening in Ljubljana could be accessed through "Metropolitan Regions>Ljubljana" and through "SFSC>Urban Gardening")

Those 3 **Entrance Doors (Level 1)** allow user interest oriented access to information:

- Interest in specific food chain type? → **Entrance Door (1) "Short food supply chain types"**: 7 different SFSC types, with particular focus on a few (e.g. urban gardening (task 4.4 + some case studies), community supported agriculture (in the Berlin case), Food Clusters (in the Rotterdam case)
- Interest in some impact field or policy objective? → **Entrance Door (2) "Impacts / Indicators / Policy Objectives"**: 15 impact areas, with detailed focus on a few (e.g. logistics (task 3.1), health (task 3.2), land use (change) and eco-efficiency (task 3.3, 5.3); Additionally, access to the interactive SIA tool.
- Interest in case specific information? → **Entrance Door (3) "Metropolitan Regions"** (6 case study regions, including the maps of Metropolitan Foodprint Tool (MFT)

There could be a more highlighted or even exclusive position of the Short Food Chain Types (and a linkage to the Impacts/Policies & Places/Project via the chain types (can be discussed)

Level 2: Pathway information: brief, easy-to-grasp information about the specific aspect (e.g. about an impact area, about a case study, about a food chain).

Level 3: Factsheets: This can be different type of FOODMETRES output, e.g. a portrait of a food chain example, an analysis, etc.

Example for such approach: http://project2.zalf.de/claimknowledgeplatform/index.php (here in total 6 entrance doors, 34 pathways leading to 25 factsheets are applied) → for FOODMETRES we could have 3 entrance doors, 28 pathways leading to maybe 20 or so factsheets plus additional SIA and MFT tool.

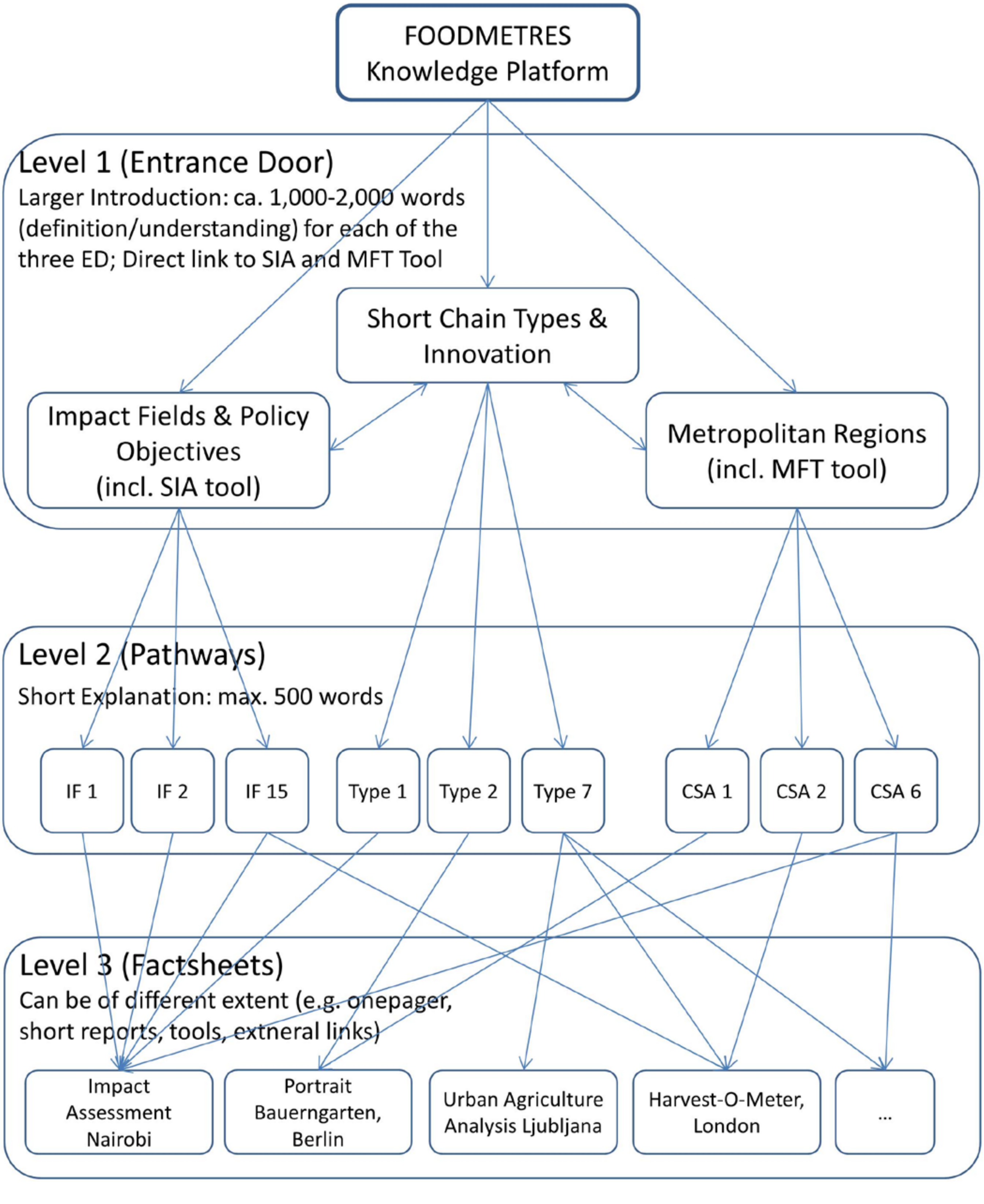


Figure. Information access scheme on knowledge platform.

Level 1 Entrance Door – Impact Fields and Policy Objectives (direct link to SIA)

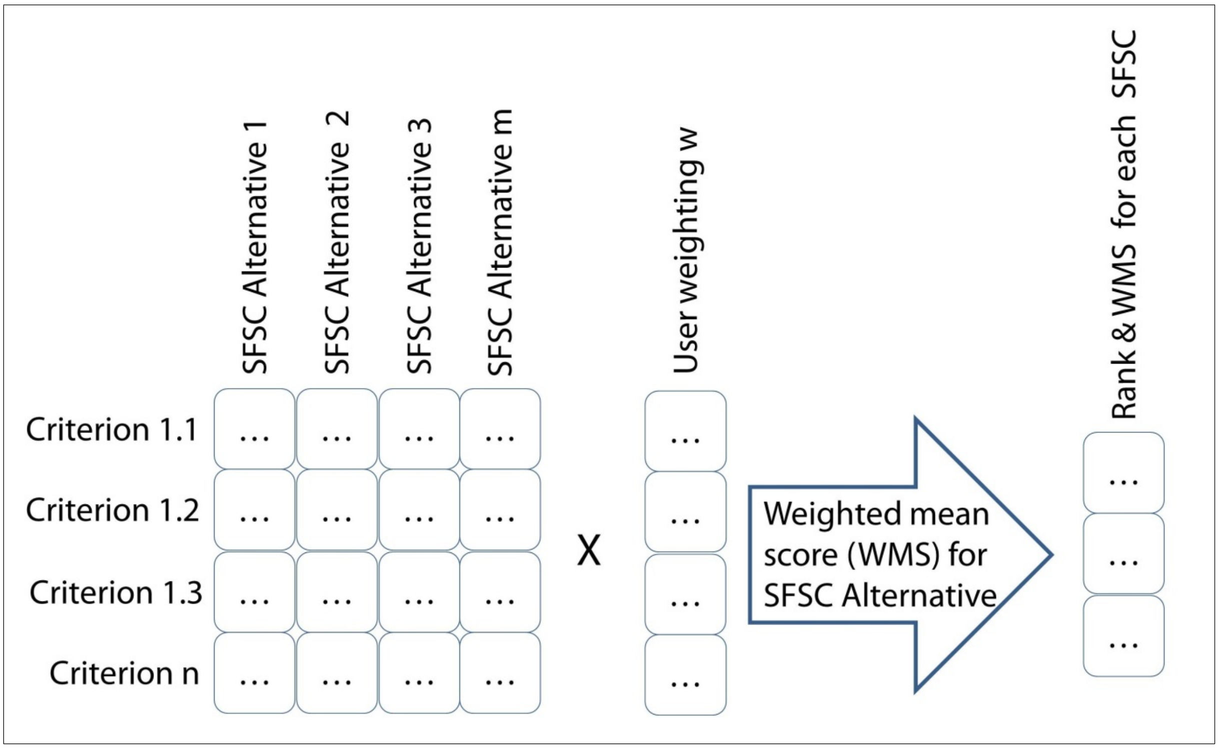
- Aim to allow the identification of most suitable SFSC to derive the user-specific policy objectives
    - o Identify comparable FCTs as recorded in FoodMetres CSAs
    - o Learn about the recognized impacts (spider graphs)
    - o Get information on associated innovation domains
    - o Upload your own (new) FCT and fill in questionnaire on SIA

Input Variables

- Making use of the sustainability impact assessment (SIA) carried out in task 5.1 (expert and local stakeholder evaluation)
- Including 15 sustainability impact and policy areas and 8 different short food supply chain types (SFSC)

Approach

- Identification of the most suitable food chain type based on the assessment scores and user weighting
- weighted arithmetic mean M_W for each food chain type



User weighting of criteria

Weight	*Meaning*
3	High importance
2	Medium importance
1	Low importance
0	Not important

Graphical User Interface and Functionalities

- Website programming

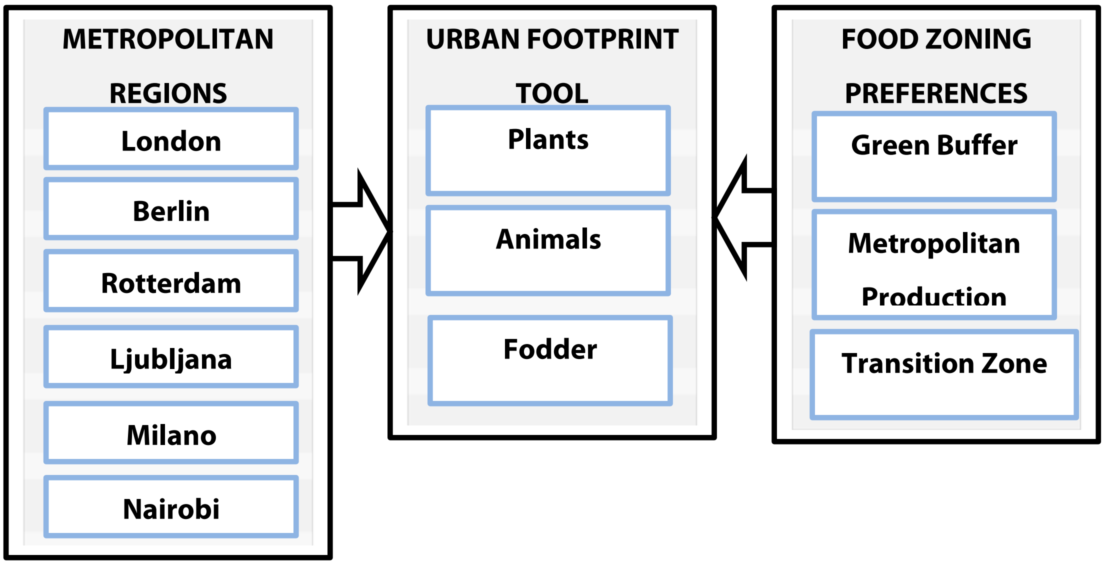
Technical Implementation

- Databank-based
- To be clarified: Where shall the KB/tool be hosted? What kind of server? Etc.
- Contact: Ingo Zasada, ZALF, ingo.zasada@zalf.de

Level 1 Entrance Door - Metropolitan Regions (direct access to the Footprint Assessment Tool)

- View pre-recorded applications of the MFT for FoodMetres CSAs (6 cities)
- Learn workshops where stakeholders have interacted with MFT
- Access the Urban Footprint Tool to run own assessments
- Upload your preferences for a metropolitan food zoning

Contact: Dirk.wascher@wur.nl



Portal Access and Usability

- Hosted via the project website (www.foodmetres.eu). As a standalone portal.
- No password or login required for those who simply want to view/download/save/print documents.
- User Accounts required for all Work Package/Case study leaders so that information can be uploaded, tagged and shared appropriately. Main portal admin account to be held by Project Coordinator.
- Site needs to support tablets, PC and mobile devices as well as work with main browsers: Internet Explorer, Firefox, Google Chrome.
- Site should adhere to appropriate accessibility guidelines (i.e. W3C WAI)
- Main language will be English, but site should support partner languages where Work Package Leaders wish to provide translated documents.
- Difficult to suggest number of likely users at this stage, storage space required or requested download speeds for documents/videos until the content has been determined by Work Package Leaders. One suggestion would be to mirror capacity provided for main project website (www.foodmetres.eu)

Portal Testing and Feedback

Once developed the KB Platform will need to be tested, we propose a multi-staged approach to this task:

4) Each partner will be asked to nominate two participants (i.e. Institution staff or stakeholders) to review the site, test links, pursue intended pathways and provide feedback (template for feedback to be designed and circulated)
5) Soft launch at the Consortium meeting (May 2015?) – partners will be introduced to the site, UCov/IFR will provide a 'virtual walk through' the platform and will encourage partners to provide feedback in the facilitated session (Feedback from KB Sphere 1 partners)
6) A small group of London Stakeholders will be asked at the 2nd Participatory workshop in London to review and provide feedback on the portal (Feedback from KB Sphere 2 stakeholders) (May 2015)

All feedback will be collated by Ucov/IFR and will be fed back to relevant partners to ensure amendments and alterations can be accommodated and actioned prior to the dissemination of the final portal at the end of the project.

Portal Timescales and Next Steps

- Specification completion (UCov/IFR) and handover to Alterra – End of February 2015
- Platform development (Alterra) – March 2015 to May 2015 (first draft ready for project meeting in May 2015)
    - Circulation / information of the COMMON task to the partners
    - Decision on responsibilities (provision of material, web-design, portal hosting)
    - Identification of available material for factsheets and linking to entrance doors/pathways (by the individual partner; central collection by???)
    - Identification of required material (e.g. texts, pictures, figures, etc.)
    - Development of common layout/template for material
    - Editing work (by the individual partner)
    - Website creation and IT-Integration of the material (need to be coordinated, could be done at ZALF)
    - SIA Tool establishment (ZALF) (until May 2015)
    - SIA Tool integration on KB portal (until September 2015)
- Soft Launch at Consortium meeting (May 2015)
    - Facilitated User Testing – London 2nd Participatory Workshop
- Final amendments actioned, further testing completed
- Finalization / launch of KB portal (September 2015)