SMARTSPEC

SMART SPECIALISATION FOR REGIONAL INNOVATION

Embracing Social Innovation

Reflection Paper: Work Package 2

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1 INTRODUCTION

This reflections paper draws on the work carried out under the first stage of *SmartSpec* WP2. It explores the concept of social innovation from multiple angles, including: a review of the relevant academic and policy literature, contributions from two workshops with academic colleagues and feedback from regional stakeholders attending the *SmartSpec* kick off conference in Brussels in November 2013. Having reviewed the available evidence, we conclude by distilling the central argument in Section 6 - which is that social innovation is too amorphous and too heterogeneous a concept, straddling too many sectors and activities, for it to be assimilated into the innovation studies literature in an unproblematical fashion.

The overall goal of WP2 is to explore the link between smart specialisation strategy (S3) and social innovation. Within that overall goal its aims are to consider:

- The conceptual linkages between S3 and SI
- Social innovation as public service innovation
- The involvement of users and citizens in processes of design and innovation
- The role of social enterprise in smart specialisation

This paper sets out to establish a clear focus for WP2 and its contribution to the *SmartSpec* project. Smart specialisation strategy (S3), although relatively new, is a rapidly evolving concept whose "growing popularity in diverse circles has been accompanied by a proliferation of ideas as to what 'smart specialisation' means for economic development and growth policies" (Foray, 2013: 2). 'Social innovation' (SI) is a more established term. Its longevity, however, has done nothing to clarify or solidify its meaning; rather it has become something of a catchall term or a buzzword employed across a range of diverse policy domains (Pol and Ville, 2009).

Our task in WP2, as set out in the *SmartSpec* proposal, is to mine the wide-ranging SI literature to explore which elements are conceptually and analytically useful in the context of smart specialisation. Our early conclusions are that S3 and SI, in its 'new form' (see BEPA, 2011), are both largely policy-directed and practice-directed concepts which are instrumentally constructed. Neither is underpinned by a strong or coherent theoretical base[1]. To borrow a term used by Jensen and Harrison (CEC, 2013f), both are 'quasi concepts (see below). Our aim in this WP is to explore how these quasi concepts are coming together in theory, policy and practice.

The purpose of this paper is three-fold:

- To reflect our early thinking on the conceptual links between RIS as articulated in S3 and SI and how we might bring into conversation two concepts which, hitherto, have been largely isolated from one another; these early reflections will be refined as we engage in empirical work;

[1] For example, Oosterlynck (2013: 107) has described the social innovation project as 'an idea longing for a theory'. Similarly, Ron Boschma in a recent presentation S3 as a 'policy driven concept looking for a theory'. (Boschma, 2013) An Agenda for Action. Paper presented at *Smart Specialisation for Regional Innovation, Towards better practice* Conference, European Parliament, Brussels, 7th November 2013

- To reflect on how actors not traditionally associated with innovation – public service organisations, users and citizens, and social enterprises – can contribute to innovation in the spaces and interfaces where S3 and SI meet;
- To sketch out a manageable research space within which to undertake focused empirical research which can meaningfully inform policy and academic debates; this research space needs to reflect the overall direction of the project.

The focus of our empirical research will be how and in what ways social innovation is being embraced in S3 strategies and what are the barriers to doing so. We are also asking whether and how the linkages could be deepened and broadened and whether bringing together S3 and SI can act as one catalyst to a more systematic integration of economic and social development.

A recent study by the INFU project concludes that while "new forms of innovation have been discussed intensively in recent years, there is little systematic exploration about their potential for different sectors and areas and its implication for economy and society (Leitner, et al, 2012: 1). In this project we seek to make a contribution to debates in the regional innovation systems literature. In this reflections paper we adopt what might be termed a *critical optimism* perspective. This approach takes note of the positive possibilities associated with purposeful change, but argues with Henry Jenkins (2007: 258), that simply pointing out opportunities, as much of the policy literature on both S3 and SI does, is not enough in or of itself. "One must also identify the various barriers that block the realization of those possibilities and look for ways to route around them" (Jenkins, 258).

We develop our thinking in this Reflection Paper under the following key headings:

Section 2 examines the twin concepts of social innovation and Smart Specialisation

Section 3 explores how social innovation and Smart Specialisation might be joined in different contexts, drawing on the objectives set out in the original proposal for this work

Section 4 highlights emerging trends in the consideration of social innovation in research and innovation strategies for smart specialisation and their implementation

Section 5 reflects on some of the challenges facing authorities that seek to integrate social innovation into RIS3 policy making

Section 6 then draws out some broad conclusions.

2 CONCEPTS

Europe 2020 seeks to address perceived shortcomings in Europe's growth model and to create the conditions for a different type of growth that is smarter, more sustainable and more inclusive. The Innovation Union, is one of 7 Flagship Strategies, and sets out a strategic approach to innovation – seeking to boost research and innovation performance in Europe, in order to enhance European competitiveness and tackle societal challenges through research and innovation. Regions are regarded as crucial in the European innovation system and in delivering Europe 2020. *SmartSpec* focuses on the emerging Regional Innovation Strategies (RIS) and their incorporation of the emergent notion of S3. To date the RIS process has predominantly been concerned with science and technology innovation (STI) and with economic growth. The smart specialisation concept as applied to RIS (RIS3) departs from this approach in two ways. First, it recognises that innovation takes place in multiple parts of the production process and that these have potential economic growth impacts. Second, it recognises the importance of the *social* in the innovation process and as a good in itself. Precisely how the social should be enrolled in RIS3 is, however, left largely open. In this section we first outline the key points of the S3 concept, we then consider the complex notion of SI and its multiple meanings, and then make a first pass at drawing out commonalities between the concepts. We will build on this process during our empirical work.

2.1 Smart Specialisation Strategy (S3)

Smart specialisation is described as a multi-scalar, strategic and integrated approach to innovation which "should optimise synergies between and within different EU and national/regional policies and should ensure greater involvement of all stakeholders in the innovation process" (Foray, et al, 2012). The regions are seen as crucial actors in delivering S3 and they are being encouraged to design regional innovation strategies for smart specialisation as a means to deliver more targeted use of Structural Funds. In particular smart specialisation is set as an ex-ante conditionality for two thematic objectives 1 (R&I target) and 2 (ICT target) of Cohesion Policy (CEC, 2010a). S3 has a dual territorial logic. At the European level it is about overcoming duplication and establishing a more diverse innovation system. At the regional (and in some cases national) level it is about specialisation around existing or credibly realisable excellence. Strength through diversity at European innovation system level will be based on local particularisation.

More specifically, Regional Innovation Strategies for Smart Specialisation (RIS3) are integrated, place-based *economic* strategies that:

- concentrate public resources on innovation and knowledge-based development priorities, challenges and needs;
- outline measures to stimulate private RTD investment;
- build on a region's capabilities, competences, competitive advantages and potential for excellence with European and global value chains;
- foster comprehensive stakeholder involvement and encourage governance innovation and experimentation;
- are evidence-based and include sound monitoring and evaluation systems (Foray, et al, 2012).

RIS3 emphasises what it terms "four C's":

- Choices: RIS3 is about the selection of a few investment priorities based on a process of entrepreneurial discovery to identify promising areas for specialization;
- Competitive advantage: RIS3 builds on current regional economic specialisation and mobilises talent by matching RTD+I and business needs and capacities;
- Critical mass: RIS3 aims at developing world class excellence clusters and providing arenas for related variety and cross-sectoral links which drive specialised technological diversification;
- Collaborative leadership: RIS3 is the result of collective endeavour involving not only the academic world, public authorities and the business community, but also innovation users (Foray et al, 2012: 18).

RIS3 departs from (as well as building on) earlier rounds of regional innovation policy in several ways. First, it introduces the concept of entrepreneurial discovery (Foray, 2013). It asserts that economic development requires a range of knowledges including, science, technology and engineering, market and sector knowledge, and business knowledge, including start-up knowledge. The discovery process means "building external organisations of connections with universities, laboratories, suppliers, users, in order to integrate and structure this divided and dispersed knowledge." (Foray, 2013: 7). Such collaborative processes are, of course, not new to RIS, and concepts such as Triple Helix have long sought to integrate multiple actors into the development process. Entrepreneurial discovery, however, and indeed the RIS3 process as whole emphasises a greater need for more forensic selection:

> "a process of identification and *selection of desirable areas for intervention* that will imply *choices* of technologies, fields, sub-systems, even firms that could be *favoured* within the framework of regional policy…In short, regions should practise resource concentration and focus by developing distinctive and original areas of specialisation" (Foray, 2013: 3, italics in original).[2]

Another departure from (or development of) previous RIS processes is the 'granularity principle' which suggests the appropriate focus for policy is *activities*. So whereas previous RIS may have focused attention on diverse 'strategic' sectors or clusters, the new approach would be to support and stimulate the growth of a new activity (Foray, 2013: 5). The impetus behind this new approach is to prevent (a) regions engaging in unwarranted mimetic behaviour: for example, attempting to attract or grow fashionable industrial sectors, (b) from giving generalised support to all parts of a sector to concentrated support for a specific part of a sector, or to a set of activities, deemed to have globally competitive potential. The overall aim of RIS3 is that regions should "particularise themselves" (Foray, 2013: 7).

This means identifying and building on internal assets, as well as drawing judiciously on external assets, through extra-regional cooperation and thus exploit niches where others do not already have insurmountable advantages (Foray, 2013). At the same time as stressing a more focused approach, RIS3 encourages regions to expand the range of sectors or activities in which they choose to specialise in order to 'particularise' themselves. This reflects concerns that regions tend to mimic the strategies of successful regions. This may require placing less emphasis on technological innovation and more on "the adoption and

[2] Foray cites a personal communication from Paul A. David.

diffusion of knowledge and innovation, including practice-based ("non-technological") innovation (e.g., social and service innovations, societal challenges, new business models, etc., demand-side measures, e.g., through public procurement) (CEC, 2013a)." It is in the context that our research asks what social innovation concepts and practices can be brought to bear in constructing more variegated RIS processes. How is S3 embracing SI and what are the barriers to doing so?

2.2 Social Innovation

In recent years the term *social innovation* has (re)entered a range of academic discourses. There is no space here to give a detailed account of, or to do justice to, the complexities, contradictions and oppositions within the voluminous and burgeoning social innovation literature. Instead, we briefly illustrate the definitional uncertainties, the multiplicity of perspectives, and the broad range of academic and policy domains which have adopted the term, and suggest that a general theory is not merely problematic but wholly inappropriate because social innovation is a quintessentially context-dependent concept. We then attempt to extract some common elements of social innovation discourses which may have resonance in the ongoing constructing of S3 and its application to RIS3 as a starting point for empirical work.

As suggested above, social innovation is a fuzzy concept. Here we focus on three areas to illustrate the complexity: *conceptual* heterogeneity, *domain* heterogeneity and *value* heterogeneity. Looking first at conceptual definitions, here we find that "there is no consensus regarding its relevance or specific meaning in the social science or humanities" (Pol and Ville, 2009: 878). This is partly because, historically, the concept can be traced to multiple and theoretically divergent roots (Moulaert, et al, 2013a). BEPA (2011) traces four broad sources of SI: innovation, social investment, change and open society. Even if we focus on a single (broad) discipline, such as sociology, we find a range of traditions which historically underpin [the various] concepts of social innovation (see Moulaert and Ailenei, 2005 and Moulaert et al, 2013a). For some authors SI remains "an idea longing for theory" (Oosterlynck, 2013: 107), but there is no agreement as to whether it is possible, or even desirable, to construct a general theory of social innovation, a forlorn quest in our view.

Notwithstanding our theoretical scepticism, Hämäläinen and Heiskala (2007) adopt a socio-technical-paradigm shift perspective, drawing on the theoretical framework associated with Freeman, Perez and others, who in turn draw on Schumpeter, to suggest that a general theory can be constructed. By contrast the SINGOCOM- KATARSIS 'school'[3] conclude that the multiple fields of use of the term mean that 'context specific' theories are more appropriate (e.g, Moulaert and Ailenei, 2005; Moulaert, et al 2007; Moulaert et al, 2013b).

[3] SINGOCOM and KATARSIS are the acronyms of two Europe-funded projects (see Annex) which brought together some of the leading scholars in social innovation, chiefly from a territorial perspective (See Annex I of this report). We use scare quotes around the term 'school' to suggest a 'scholarly alignment of concerns and outlooks', but we do not wish to underplay the heterogeneity and subtlety of thinking which separates the wide range of views and approaches in these networks: Moulaert et al (2013) provide an invaluable compendium of this work.

Another 'school' (Young Foundation-Social Innovation Exchange) also deny the relevance of a general theory, being more concerned with action and practice and with constructing methods through which multiple forms of social innovation can be pursued (SIX-Young Foundation, 2010). So, for example, Murray et al's *Open Book of Social Innovation* (2010) provides methodologies for social innovation practice, from 'prompts' to 'systemic change', based on a compendium of practice examples from across the globe.

There are also definitional problems around the question as to when social innovation has been realised. Most commentators are agreed that social innovation is a *process*. At what stage the process becomes social innovation is not clear; nor is it clear whether the process plus *intentionality* to achieve a socially valuable goal is innovation, or whether beneficial outcomes must be achieved. So, for example, the OECD (2011) suggests that there is social innovation whenever "new mechanisms and norms consolidate and *improve* the well-being of individuals, communities and territories in terms of social inclusion, creation of employment, quality of life" (OECD: 2011: 13, italics added). Eurofoundation (2013) adds an additional dimension where social innovation has to provide "*sustainable"* outcomes for its users. In neither case is it clear how such outcomes would be measured, a point to which we return when we discuss social innovation metrics.

Turning to domain activity, one of the difficulties in fixing a definition or theory of social innovation is the breadth of practice areas in which the term is adopted, ranging across a swathe of social processes and policy domains. So social innovation is invoked in already under-conceptualised areas such as 'social inclusion', 'the social economy', 'new global protest movements' and in developing practices around social media. It is also being brought to bear in recognised policy domains, including governance and public administration (Clark et al, 2008; Harris and Albury, 2009), social entrepreneurship and social enterprises (Murray, et al, 2010; OECD, 2010; Price and Morgan, 2011); employment and education (CEC, 2013a) , community and urban development, including in cultural and arts practices (Moulaert, et al, 2013a)[4], corporate change and workplace innovation (Drucker, 1987; Oeij, et al, 2011). In addition to this bewildering array of domain activity, the term has been adopted "to describe things which are neither 'social' nor 'innovative'. In many cases, terms such as improvement, reform, modernisation and efficiency saving are used interchangeably with the term social innovation." (SiX and Young Foundation, 2010: 14).

Finally, there is another set of complexities associated with what we have called value heterogeneity, which in turn inflects methods, desired outcomes and processes. Social policy pronouncements have taken on a strong moral (and indeed moralising) character in many countries in recent years, suggesting that social innovation is tied to 'the good', but it is rarely specified how 'the good' would be defined or who would define it. But different social innovation discourses have different underlying value systems. To take one value question, which is particularly relevant to *SmartSpec:* what is the relationship between the social and the economic? There are two radically different perspectives on this question.

Firstly, is social innovation primarily about *complementarity*, that is to say about complementing traditional economic innovations in order to "reach systems synergies, productivity growth, increasing returns and steadily growing incomes" (Hämäläinen and Heiskala, 2007)? This perspective is sometimes associated with emerging quadruple helix

[4] Arguably some community and urban development practitioners have been undertaking 'alternative' social innovation practices since the 1970s.

discourses which seek to incorporate social innovation into the STI paradigm (see Arnkil, et al, 2010).

Or, secondly, is social innovation principally about *alterity*, that is to say about constructing *alternative* economic spaces to the dominant neo-liberal market paradigm, drawing on community, social economy and diverse economy traditions? (Fuller et al, 2010; Klein, 2013). This in turn relates to questions as to whether social innovation should be about the "transformation of society as a whole" (Moulaert et al, 2005: 1969) or whether it seeks merely to ameliorate longstanding or newly emerging social problems, building on the 'European social model'.

Another important values-related question surrounds the role of the private sector. There is general agreement that social innovation is mainly carried out by "organisations whose primary objectives are social rather than economic and where 'profit' is re-invested" (NESTA, 2007a: 1). Here social enterprises and social entrepreneurs have a key role to play (OECD, 2011). 'Philanthropic' capital is a key role of the private sector in the US. Others are more wary of corporate philanthropy and warn of the difficulties of making this model work (Skapinker, 2013). In a recent book, Mulgan (2013), one of the key advocates of what might be termed 'third way social innovation', points to the tensions between the manner in which some business fortunes are amassed and the values the same individuals and companies draw upon when engaging in philanthropic social innovation when espousing social innovation.

The potential for a broader relationship to the private sector and to market principles is also a subject for debate. The World Economic Forum (WEF) takes the view that social innovation "refers to the application of practical, sustainable, *market-based* approaches (italics added)" to societal problems and "that governments must be prepared to collaborate with the private sector on new ideas."[5] Several organisations which champion social innovation work closely with major corporations, including some which have recently been criticised for what might be seen as 'anti-social' practices, such as tax avoidance and business practices which have resulted in multi-billion dollar settlements.

The wide-ranging, often contradictory and indeed 'chameleonic' character of the term social innovation (Moulaert, et al, 2013, b: 15) has led some scholars to doubt the utility of the concept to academic study, calling for it to be abandoned as a scientific concept (Pol and Ville, 2009; Moulaert, et al, 2013, b). In spite of (or perhaps because of) this lack of clarity, the notion of social innovation has found "a home in policy at the highest level" (Moulaert, et al, 2013b: 1). At the global level, think tanks and policymakers, such as UNDP and the World Economic Forum have organised competitions 'challenges' and global summits [6],[7]. A number of national governments have also established organisations to consider how social innovation is to be adopted and supported (BEPA, 2011). The OECD-LEED Forum has been interested in social innovation for a number of years and has been instrumental in bringing the term to wider prominence amongst policymakers.

Of most significance to this reflections paper is the purchase that the concept has had on policy thinking in the European Union, where social innovation is now a cross-cutting theme within the Innovation Agenda.[8] The term is employed by a number of Directorates General

[5] See: http://www.weforum.org/content/global-agenda-council-social-innovation-2013
[6] http://www.eiseverywhere.com/ehome/index.php?eventid=53222&
[7] http://www.weforum.org/content/global-agenda-council-social-innovation-2013
[8] The Innovation Union is one of 7 key flagship initiatives within the Union's European 2020 Strategy for Smart, Sustainable and Inclusive Growth. http://ec.europa.eu/research/innovation-union/index_en.cfm?pg=intro

(DGs) to express current policy directions and to recast past policy (see, e.g., CEC, 2013a). What was particularly influential in this regard was a report by the Bureau of European Policy Administrators (BEPA, 2011), which developed a synthetic overview of academic and practice literature in a form which appears to have proved useful for policy formation. Given the centrality of BEPA's definitions in framing European policy statements, we summarise some of its key points here. The BEPA Report reflects the commonly held view that the State and the market have failed to successfully address old social problems and doubt their capacity to address emerging challenges, in the context of austerity.

According to BEPA:

> "Social innovations are innovations that are social in both their ends and their means. Specifically, we define social innovations as new ideas (products, services and models) that simultaneously meet social needs (more effectively than alternatives) and create new social relationships or collaborations. They are innovations that are not only good for society but also enhance society's capacity to act. (BEPA, 2011: 9)
>
> The *process of social interactions* between individuals undertaken to reach certain outcomes is participative, involves a number of actors and stakeholders who have a vested interest in solving a social problem, and empowers the beneficiaries. It is in itself an outcome as it produces social capital" (BEPA, 2011: 9-10, italics in original).

The report develops a schematic classification which divides social innovations into three broad categories:

- Firstly, the grassroots social innovations that respond to pressing social demands not addressed by the market and directed towards vulnerable groups in society.
- Second, a broader level that addresses societal challenges in which the boundary between 'social' and 'economic' blurs and which are directed towards society as a whole.
- Third, the systemic type that relates to fundamental changes in attitudes and values, strategies and policies, organisational structures and processes, delivery systems and services. Initiatives relating to actions to make citizens more aware of climate change and recycling are examples of this last category. These social innovations, which are often initiated by institutions, play a part in reshaping society as a more participative arena where people are empowered and learning is central (BEPA, 2011: 10).

Having established this degree of analytical separation the report later goes on to emphasize their interdependency:

> "These approaches are not mutually exclusive, but rather interdependent: the first approach is the foundation of the second which creates the conditions for the third – an innovation that addresses a social demand (e.g. care of the elderly) contributes to addressing a societal challenge (ageing society) and, through its process dimension (e.g. the active engagement of the elderly), it contributes to reshape society in the direction of participation and empowerment" (p43).

The BEPA schematic definitions have been important in forming policy at the European level; for example, the Guide to Social Innovation draws heavily on the BEPA definitions (CEC, 2013a) and our research to date suggests they are helping to inform understanding of social innovation within the RIS community, with particular attention being paid to the

societal challenge approach (see Section 4, below). Given its policy resonance, and given that our research mission in WP2 is to explore the linkages between economic and social policy, the BEPA definition is one useful starting point for our work.

It should be noted, however, that the BEPA approach does not command universal acceptance. At least five criticisms can be made of it:

- First, the vagueness and potential inoperability of the definitions provided. For example, a recent study for DG Research and Innovation points out that while this definition gives some shape to the notion of social innovation, "it remains under-specified in that it introduces additional under-defined and difficult to operationalise concepts such as 'good for society' and 'society's capacity to act" (CEC, 2013, f: 40). Similarly it is not clear how the 'collective dynamics' between separate policy domains at a range of territorial scales are to be engendered. The adoption of abstract and non-specific terminology is hardly unique to BEPA with the literature being littered with phrases such as 'human development', 'empowerment' and so on, but such terminology does not help to clarify the meaning.
- A second, broader critique suggests that the study and resulting definitions draw too strongly on management-based approaches to social innovation and "remain close to economic innovation studies, both in approaches and goals" (Van Dyck and Van den Broeck, 2013: 132). Here the accusation is that the study overemphasises social innovation as an *instrumental* approach to stimulating economic growth and delivering more cost effective services to "open cheap possibilities for growth" (Van Dyck and Van den Broeck, 2013: 132).
- A third related criticism might be that the vision of social innovation presented by BEPA has echoes of the "social investment state" (Giddens, 1998), described by Lister (2003) as "a particular configuration of social democratic and liberal/neo-liberal approaches" dominated by a "particular instrumentalist discourse." The 'social investment state' represents a pragmatic response to the perceived economic and social challenges facing mature welfare states, with economic and social policy being integrated, but "on terms which do not challenge the traditional subordinate 'handmaiden' relationship of the social to the economic (Lister, 2003).
- A fourth criticism implied in the foregoing might be raised regarding the synthetic definition of 'society'. Here, although 'competing interests' are acknowledged, little is said about the deep rooted societal fissures that many social innovation scholars are concerned with, nor the fundamental changes required to address such fissures.
- Finally, there are criticisms around space and place. BEPA acknowledge the importance of national differences between Member States in respect of social change, classifying them into broad categories based on Esping-Andersen's models of welfare capitalism: Nordic, Anglo-Saxon, Continental, Mediterranean and Eastern Member States. In doing so the report *potentially* gives a reductive account which fails to take into account the national systems of innovation within these blocs. Although the report points to cultural and political differences to explain progress or lack, thereof, it seems to assume that a particular model (Nordic-Anglo-Saxon) is a recipe for the rest of Europe. Furthermore, little is said about the territorial specificities of the regions or communities within which social innovations are embedded (Van Dyck and Van den Broeck, 2013).

To conclude this brief review of the social innovation literature, we can say there is not a clear definition of the term social innovation, hence the wide range of approaches to studying,

framing and practicing social innovation. This is partially explained by the breadth of policy and practice domains in which the term is utilised and deployed. Different groups of scholars and practitioners also have different goals and objectives. Finally, and crucially, different social innovation 'schools' ultimately exhibit different *values*, even if these values are articulated in the abstract language of 'human development' and 'empowerment'.

We are not yet able, therefore, to draw on a coherent, universally accepted definition of social innovation which can be applied to smart spatial specialisation. Rather we adopt the view suggested by Jensen and Harrison (CEC, 2013f: 30), *viz*:

> "Social innovation is a useful concept. Its utility lies in its capacity to group researchers and policymakers around a set of issues and concerns and out of that grouping generate social knowledge that will be of use to the policy community as well as for academic researchers"

Jensen and Harrison describe social innovation as a 'quasi-concept", the utility of which is "fostering cohesion across a policy network, composed of researchers, analysts and decision-makers." With a quasi-concept as capacious as social innovation, the useful elements will vary according to the academic-policy networks to which it is being applied. In this project we are concerned with its application to the complex domain of multi-stakeholder and multi-level territorial innovation strategies (TIS), with particular attention to regional innovation strategies (RIS) and practices.

3 LINKING S3 AND SOCIAL INNOVATION

Table 2.1 presents a stylized binary of the two traditionally separate policy and practice communities, the RIS community and the (territorially focused) SI community. Clearly this oversimplifies the real-life complexity of policy, institutional and organisational relations and also does not account for differentiated arrangements between countries. We would suggest, however, that it is a useful tool in reminding us that problem of policy silos is a real one. We do not intend to elaborate on all points in the table, but it is worth taking a couple of examples to show how these two 'innovation arenas' have traditionally diverged in order to express the difficulties faced in bringing them into conversation.

First, regional innovation strategies are above all *economic* strategies, the goals of which are ultimately jobs and growth. In line with the broader innovation systems, the principal focus of RIS has been STI and "to date social impacts have largely been unintentional by-products" (OECD, 2011). The technological bias of traditional innovation policy and the mainstream innovation literature has been a source of frustration for many in SI researchers (NESTA, 2008; OECD, 2011; Moulaert, et al, 2005; Moulaert et al, 2013a). Redressing this 'bias' may be politically difficult given the legacy structures which have built up and buttressed it during twenty plus years of RIS policy and practice. This is something we will explore in our empirical research. Second, traditional governance and institutional structures do not necessarily support more integrated and inclusive systems, which is precisely what is required to foster more collaborative approaches to innovation. Both vertical and horizontal policy silos exist not only with the synthetic domains of RIS and SI, but within their constituent sectors. Again this is something we will consider in our empirical research.

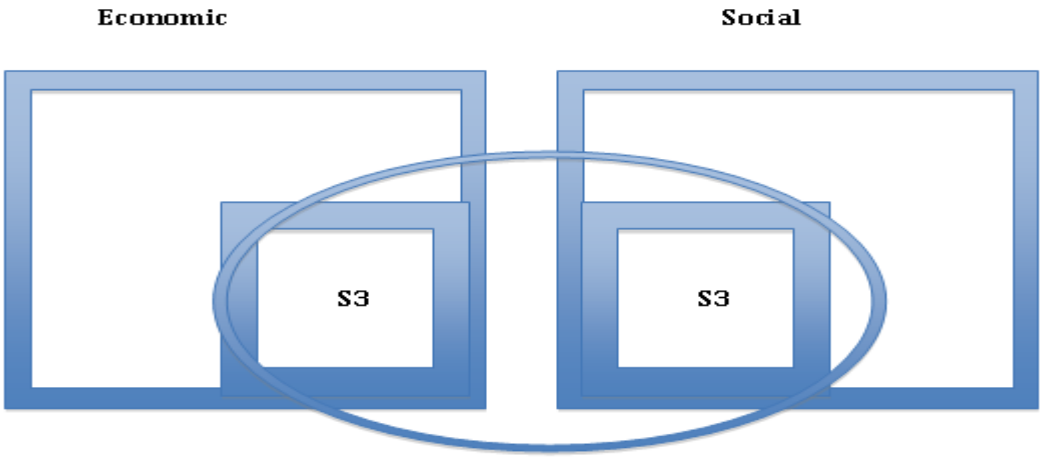
Table 2.1: Stylized Binary of Traditional RIS-Social Innovation

Traditional RIS	**Traditional Territorially Focused SI**
Economic goals	Social goals
Policy domains: STI, Economic-industrial, Regional Development; competitiveness and inter-territorial cohesion	Policy domains: Social policy (poverty, employment, urban regeneration, education, etc.), social cohesion
Academic disciplines: STI, Economic-industrial, Regional Development , Economic Geography – often policy focused	Academic disciplines: Sociology, urban studies, planning, community economics, social policy; social economy – often action focused
Market values (with public support)	Social values (with public support)
Wealth creation/economic growth	Social wealth creation/Resource distribution
Efficient socio-economic arrangements	Fair socio-economic arrangements
STI-bias	Critical of STI-bias
Social market/neo-liberal models of capitalism	Going beyond 'dominant capitalist and market discourses'/alternative economies
Top-down and technocratic	Grassroots/bottom up
Economic and innovation funding (e.g., ERDF)	Welfare-related funding (e.g. ESF)
EU-National-Regional governance structure: Regional role recognised	EU-National-Local role governance structure: Regional role limited
Fragmented communities of *economic* development practice	Fragmented communities of *social* development practice

Source: Authors' analysis

This stylised picture is, of course, changing. At the European level public policy and civic strategies are striving to address some of these binary divergences. So, for example, BEPA emphasizes the need to 'blend' economic and social spheres, rather than seeing them as separate policy arenas. Pol and Ville (2009) also make this link, particularly in relation to what they call 'bi-focal innovations'. From the RIS side, S3 seeks to enrol a broader range of stakeholders, including citizens in the regional innovation design process. This more integrative and inclusive turn – or at least rhetoric – reflects developments in global academic and policy thinking, but it also reflects more organic bottom up approaches. The schema in Figure 3.1 imagines the role of S3 in creating possibility spaces for such integrative solutions. In this section we identify commonalities which we regard as potentially important in operationalizing more integrated approaches. There are, however, a set of common themes which emerge when comparing social innovation and the nascent S3. These common themes may be no more than the common intellectual furniture of the day and how these play out in the real world will be explored during our empirical work.

Figure 3.1: Smart Specialisation and Social Innovation: Imagining the Possibility Space



Source: the authors

In this section we draw on the innovation literature broadly to make these linkages. We organise the section around a burgeoning theme of innovation studies, namely, *collaborative innovation,* which is widely practised in the private sector even if it has not been fully reflected in conventional ideologies of innovation (Cooke and Morgan, 1998: Morgan and Price, 2011). We then go on to discuss, in turn, three potential components of collaborative innovation that are pertinent to *SmartSpec*, namely (i) the State and the public sector (ii) civil society, citizens and users, and (iii) social enterprises.

3.1 Collaborative innovation as the emerging dominant paradigm

Putting the S3 concept into practice requires collective action. The process of 'entrepreneurial discovery ' seeks to bring together and consolidate multiple 'entrepreneurial' knowledge sets currently dispersed through a range of actors, such as firms, higher education institutions, independent inventors and innovators (Foray et al, 2012; NESTA, 2007c). Although the notion of 'entrepreneurial discovery' is relatively new, the notion of innovation as a collaborative and collective exercise has long been recognised by scholars (Cooke and Morgan, 1998). The notion of 'open innovation'

(Chesbrough, 2003) has spawned a new generation of literature on collaborative innovation between firms and beyond (see Galbraith and McAdam, 2011 for a critical review).

Inter-organisational collaboration has been facilitated by more powerful information and communications technologies (ICTs). In the private sector in particular, digital technologies underpin innovation processes which are increasingly based on the networked enterprise, often operating at a global scale, enabling firms to tap into and draw upon a globally dispersed 'collective intellect' (Castells, 2001; Gann and Dodgson, 2007). It is argued that these[9] processes can be seen in a wide range of industries, such as health, transport, energy, digital media, the built environment and education, as well as across sectors, bringing together hitherto discrete disciplines such as science and the creative sectors (Mitchell, et al; 2003). These innovation networks are increasingly organised at the international scale and driven by large businesses internationalising their R&D activities and sharing knowledge with external partners through the medium of ICT and enhanced physical mobility (NESTA, 2007c). These new practices also open up new spaces for small businesses, micro firms and for individual trading (e.g., OECD, 2007; Friedman, 2007; Leadbeater, 2009), as do new "on-line innovation dating agencies, brokering services and trading sites" aimed at SMEs (Gann and Dodgson (2007: 12).

Notions such as *user innovation* (Von Hippel, 2005) and '*user-led innovation'* highlight the source from which the innovation has emerged. In short, "user-led innovation comes from the individual or firm that has acquired a product in order to use it rather than the firm that has supplied it" (NESTA, 2008: 14). Another theme emerging from the management of innovation literature revolves around the idea of *co-creation* (Prahalad, and Ramaswamy, 2004) which emphasizes the role of the consumer in adding value to the innovation process. This extends the spaces of collaboration and brings users more formally into the innovation frame.

Co-creation, and cognate terms such as *co-design*, increasingly involve collaboration between the private sector and the academy. Co-creation has been boosted as a result of the growth of social media (OECD, 2007). There is now an extensive and growing literature on the impact that internet and social media tools (such Facebook, Twitter and Instagram, often supported by mobile technologies) are having on patterns of business and social interaction. Radical claims are being made for social media technologies and the empowering effect they are having in elevating the role of the consumer in the innovation process, both with firms and with each other in terms of new peer-to-peer relationships. Leading firms are consciously trying to engage user communities (often known as 'modders' (NESTA, 2008) in co-construction and beta-testing products and services. 'Continuous testing', whereby firms continue to tweak products through large scale field trials, is also becoming more popular: Google, for example, tested Gmail, Google Circles and Google+ in this way. Summarizing a decade of innovation research around the impact of digital technologies, Brynjofsson and Saunders (2010: 126) assert that:

> "Technology has enabled us to coordinate and amplify collective intelligence of thousands, millions, and perhaps someday billions of minds to achieve goals that would otherwise be impossible".

[9] This paragraph draws heavily on Richardson and Tranos (n.d)

Notions such as 'co-creation', 'crowdsourcing', 'prosumers ' (Toffler, 1980)[10] and 'mass collaboration' (Tapscott and Williams, 2008); 'mass innovation' (Leadbeater, 2009) and 'socialnomics' (Qualman, 2012) have been coined to try capture the new social dynamics of innovation.

The territorial innovation systems literature in its various forms (see Moulaert and Sekia, 2003 for further discussion) has been concerned with building competitive advantage based on innovation in firms working together with other actors. Economic geographers "highlight the importance of proximity in the generation of knowledge externalities and in stimulating cooperation and trust among a range of actors, including both private and public organisations" (Marques, 2011). One of the most prominent concepts emerging from RIS discourses is the Triple Helix, which privileges the industry-public sector-university nexus in the innovation process. The RIS literature has only had a limited amount to say about the role of citizens and users in the innovation process, though this is now starting to be addressed through notions such as the Quadruple Helix (QH), which we address in more detail in Section 4 of this report.

The social innovation literature also stresses collaboration, though the actors involved in collaboration tend differ from those in the management innovation literature and RIS literature. Detailed approaches to collaboration vary across different social innovation 'schools'. Some emphasize the role of institutions such as local authorities in stimulating and facilitating innovation, others see it as more of a bottom up civic process. We address one issue deemed important in producing more socially inclusive social innovation in RIS3, namely 'trans-disciplinarity' (Haddock, 2013).

From the perspective of the academy, this means multiple disciplines coming together and iterating in reflexive ways around common issues. There is some evidence that universities and research funders are now seeking to construct such spaces, though even this relatively modest endeavour is not straightforward (Benneworth and Jongbloed, 2009). Haddock and colleagues use the term trans-disciplinarity in a wider sense to signal the coming together of scientists, practitioners and stakeholders[11] so as to engage in joint problematizing of the field in which social innovation is to be produced. This conception has resonance with some of the business processes describe above and also with the S3 process itself, but with this very important difference – the role played by 'community' and 'ordinary citizens' is given greater emphasis and the value attributed to their knowledge in problem *identification* and problem solution is seen as crucial (see, also, Vadrot, 2011; Hambleton and Howard, 2012; Moulaert, et al, 2013a).

Problem identification here is not merely beta-testing but rather about identifying which problems should be actually addressed and funded. This in turn raises questions of direct democratic decision making which has not necessarily been a feature of mainstream innovation policy up to now. Here, engagement is seen as a long-term and iterative process from which new 'knowledge alliances' emerge and which, as a result, produce more 'socially robust knowledge' (Novy, et al, 2013: 430). Such multi-actor engagement is not, of course, unproblematic. Are such approaches suitable for RIS and, if so, how can they be brought to bear?

[10] Ritzer and Jurgenson, 2010 and http://georgeritzer.wordpress.com/category/prosumption/ for a more critical take

[11] Haddock is chiefly concerned here with social excluded groups and the construction of alternative definitions of social problems, but this could be extended to other populations

As we have seen, S3 calls for collective action at multiple levels, an approach which echoes the views of other researchers (e.g., BEPA, 2011; UN, 2013). NESTA (2007c) suggests that innovation in the 21st Century will require more 'extreme partnerships', crossing 'sacrosanct' disciplines, sectors and territorial scales. This, in turn, will require "behavioural, organisational and technological change" (NESTA, 2007a: 1) across *all* stakeholders and at *all* territorial levels. We emphasise 'all' for two reasons. First, although our research principally focuses on the public sector, users and citizens, and social enterprises, other stakeholders such as the private sector and 'knowledge institutions' will also have to change. Second, although our research focuses mainly on the regional level, change is required at *all* territorial levels of the EU's multi-level polity (Morgan, 2013a).

Collaborative innovation will thus depend on the success of these multi-level actors coming into alignment. In particular 'scaling up' innovations will often rely on engaging actors with different competencies and powers, and knowledge exchange networks, distributed at multiple territorial levels (BEPA, 2011). Forming such extensive collaborative partnerships is, of course, none too easy and one of our aims is to explore the scope for and the limits to such partnerships. In the following three sub-sections we explore the potential contribution of three sets of actors.

3.2 Public service innovation to support social innovations

> "The State's role is not just to create knowledge through national labs and universities, but also to mobilize resources that allow knowledge and innovations to diffuse broadly across sectors of the economy. It does this by rallying existing innovation networks or by facilitating the development of new ones that bring together a diverse group of stakeholders. However, having a national system of innovation that is rich in horizontal and vertical networks is not sufficient. The State must also lead the process of industrial development, by developing strategies for technological advance in priority areas" (Mazzucato, 2013: 40).

Much of the literature on social innovation in the public sector has its roots in New Public Management (NPM) thinking (Lévesque, 2013) and in neo-liberal anti-state or small-state theories. Here, the impetus for public sector innovation has been threefold: (i) an ideological commitment to reduce the role of the state (Jessop, et al, 2013); (ii) cost and efficiency savings through 'doing more for less', (Clark, et al: 2008); and (iii) inserting the private and third sectors into public policy delivery processes, partly to gain efficiencies and partly to enhance local democracy (Morgan and Price, 2011). The (politically-perceived) need to reduce budgets in the context of austerity has accelerated these public policy trends. Some commentators have queried whether the concerns expressed in this new public policy literature actually fall under the social innovation rubric or whether they are simply re-badging policies that are neither new nor innovative and not necessarily social.

A dominant theme in this new public policy literature has been to denigrate and ridicule the role of the state (Sainsbury, 2013). Critics of the state provide little insight or evidence as to what services are best delivered by whom, or furnish significant evidence of efficiency savings or service improvements, and often fail to take into account the relative complexity of public sector innovation and the range of economic, social, political and environmental objectives which is being addressed (Clark, et al, 2008; OECD, 2009; BEPA, 2011, Sainsbury, 2013).

In this study we eschew the 'public sector bad/private and third sectors good' binary and focus on the existing and potential roles of the State and public sector actors at various territorial levels in facilitating socially innovative processes in regional innovations systems in the context of smart specialisation. Mazzucato has recently demonstrated the powerful and key role played by the national State not only in addressing 'market failure', but also in actively *shaping* and *creating* markets in technology innovation, in making things happen "that otherwise would not" (Mazzucato, 2013: 195). The "entrepreneurial state" thesis is applied in this work to the national level, though it is equally applicable to the regional and other sub-national levels.

The regional innovation literature has long been concerned with the role of the State at a variety of territorial levels (e.g., Wolfe and Bramwell, 2008), not just as a powerful entity in itself, but in its interaction with other actors in regional governance systems. The evidence suggests that even though new forms of innovation are emerging, the State continues to play a key role. For example, a recent study of open innovation three European countries (the Netherlands, Belgium and Estonia) found that "policymakers have a considerable responsibility in taking policy measures and in shaping the institutional and legal context to stimulate open innovation practices in an economy" (de Jong, et al, 2010: 892). Murray et al (2010) demonstrate that, historically speaking, the State has played a key role in social innovation and continues to do so. Here market processes are even more likely to be inefficient in co-ordinating innovation activities (OECD, 2011). Our concern here is the various (potential) roles of public sector organisations as 'innovation intermediaries' a term that denotes "a range of organisations including brokers, third parties and agencies that are involved in the innovation process" (Galbraith and McAdam (2011).

This is not to say that the public sector is always fit-for-purpose and major reforms are required, especially with respect to public sector skill sets and public sector culture, which remains profoundly risk-averse (Morgan and Price, 2011). Murray et al (2010) suggest that a number of changes are required in order to better facilitate social innovation today. These include: linking innovation to strategy, visible leadership, incentives for innovation, appropriate risk management, training for staff, the creation of 'circuits for information' (information flows within and beyond the organisation), user engagement, learning cultures and 'safe places for innovation' (Murray et al, 2010: 147-148). We also need to note that the legitimacy accorded to the State and public sector as a key player in economic and social processes will vary across Member States, and within them too. Legitimacy of the local, regional or national State is particularly important as trust is crucial to collaborative working. Our concern in *SmartSpec* WP2 is what the role the State and public sector is playing, or could play at the interfaces, between economic and social innovation in the context of S3. If the State is not trusted or competent, then other actors will need to step into the breach to facilitate collaborative working.

Turning to the process of 'entrepreneurial discovery', although it is imagined as a collective process, with no prescription as who should lead the process, in practice, some combination of national, regional and local government (with guidance from the Commission) is likely to be an important player. If the economic and social spheres are to be 'blended' in RIS3 then the State will be a key actor in the 'orchestration of social discovery' (Hambleton and Howard, 2012), given its critical role in planning and funding of social provision. Public sector actors will be required to develop 'collaborative leadership' skills to work across organisational boundaries (Hambleton and Howard, 2012: 11). This is not necessarily easy. New forms of innovation require new alliances and 'the usual suspects' in regional development (such as the Triple Helix industry, public sector, university nexus) will need to

brought into collaboration with other actors including the social enterprises, civil society and end users. Here policymakers' roles may involve creating 'enabling frameworks' and acting as "mediators within a wide range of coordination processes" (Leitner, et al, 2012). Several commentators are now developing the notion of co-creation in the sphere of activities traditionally designed and carried out by the public sector. Hutton and Schneider suggest that:

> "Recent research is beginning to rediscover this collaborative, altruistic instinct in human beings….When people have confidence in others' willingness to contribute their fair share, they will be moved by honour or altruism to do the same, even if it is implausible to expect that the costs will be recovered at a later date" (2008:13-14).

As Hambleton and Howard (2012: 33) point out, the "co-creation approach calls for new and riskier ways of working, effectively giving away power with a goal to achieving better solutions." They also argue that this requires public sector leadership of a non-traditional kind involving: creating new spaces, or settings, for people from different backgrounds to come together and learn from each other; getting the right people into the spaces they have created; modelling ways of working that encourage openness and courageous behaviour, and they help others overcome their fear of change or failure. Bason (2010), drawing on his work in Mind-Lab, also focuses on co-creation, considering techniques drawn from design and ethnographic work to inform innovative thinking.

One key task in both 'discovery processes', where the State will have a key coordinating role, is in identifying needs as well as assets. Assets-based approaches are increasingly popular in a range of social policies. In the context of community development, asset-based community development (ABCD) suggests that:

> "all communities have assets, skills, capacities and networks; secondly, that effective community development begins with the identification of those assets, the building of relationships with and within communities, and the use of assets and relationships in achieving the visions and plans emerging from the process" (Kunnen, et al, 2013: 286).

The ability of the public sector to adapt or co-create this new policy and practice regime is not, of course, a given. The State and the wider public sector comprise a range of separate organisations, each with a different mandate, operating at different spatial scales and within different organisational and policy silos, often with little vertical or horizontal communication. In the context of RIS this means overcoming a legacy of silo-based thinking and practice. Innovation usually occurs at the regional and city-regional level, in association with those national ministries concerned with innovation.

In contrast, social policy and social innovation practice is generally a local and place specific matter, though often with guidance and funding from separate national ministries. Thus cooperation between municipal actors within an organisation, and between neighbouring municipalities, will be crucial (Wintjes, et al, 2013). This can undermine innovation processes both *within* individual organisations, but also between public sector organisations, and constrain other actors which are in some way dependent on the public sector. This may impede innovation within the social policy community and stymie diffusion to other policy communities. The literature lists a number of traits that can impede the public sector from playing a full role in RIS3 processes. These include: bureaucratic cultures, risk aversion, heritage and legacy, inability to keep up with pace and scale of change, and the absence of a capacity for organizational learning (Clark, et al, 2008).

As with the private sector, it is hoped that the public sector will be able to bring new digital technologies to bear on innovation processes, particularly 'open innovation' (CEC, 2012a). Generally speaking, however, the public sector has been slower to adopt new technologies (Dunleavy, et al, 2006: OECD, 2009). In the UK, for example, it is clear that many public sector organisations are still wrestling with areas such as transactional services and informational services which are still under-developed and under-utilised. There is, however, significant policy interest at the both the national and local government levels in adopting social media tools (GOSS Interactive, 2013). The main objectives of investment were improving web site presence and greater and richer interaction with customers. As with previous rounds of 'e-government' cost savings and improved services are key imperatives behind recent and proposed investment (GOSS Interactive, 2013).

There is also, however, a broader agenda which reflects the current (real or rhetorical) trend towards engaging with service users (a) to improve services by mobilising the user as customer and (b) to encourage participation in the democratic process by mobilising the user as citizen. E-citizen-centric and 'e-emancipation' discourses are, of course, not new (see, e.g., Frissen, 2008; OECD, 2009), but they have been reinvigorated by the mainstreaming of communications technologies and by the perceived 'read-write' characteristics associated with Web 2.0 and social media (Chadwick, 2009). A number of initiatives are emerging at local government level[12] in Europe in terms of interactive webs, wikis, crowdsourcing, utilising big data; but much of this is still in experimental mode[13] and European cities tend to lag those in the US[14]. This area of experimentation will be a key aspect of Horizon 2020[15].

Far from being an unnecessary luxury, public sector experimentation is now essential if the public services we associate with the welfare state are to be sustainable in and beyond the "age of austerity". This challenge is especially acute in state-centric nations and regions, where the private sector is ideologically frowned upon as a service delivery mechanism and where the public sector is therefore expected to carry the full burden of public service delivery. A classic case in point is Wales, where public service reform, though urgently required, faces a number of major barriers, the most important of which is said to be " a strong sense of isolation among innovators, a feeling that they are often struggling against an anti-innovation compliance culture" (Gatehouse and Price, 2013:4).

Schumpeter well understood the barriers facing agents who sought to experiment and generate something new against the forces of inertia in society at large. He highlighted the difficulty of entrepreneurial endeavour "amidst the work and care of the daily round" and he pointed to the "scope and time for conceiving and working out" new ways of doing things and of the 'mental freedom' required to do so (Schumpeter, 1934). For many of the actors who are expected to contribute to new collaborative processes, scope and time and mental freedom are all likely to be in short supply, especially in the public sector. Indeed, many actors in the public, civic and social enterprise sectors live in fear of losing their jobs and they

[12] See for example: http://www.europecommons.org/
[13] See for example: http://www.civiq.eu/news/civiq-presenting-world-forum-democracy
[14] See for example: http://www.theguardian.com/local-government-network/2013/oct/21/open-data-us-san-Francisco?CMP=&et_cid=53279&et_rid=ranald.richardson@ncl.ac.uk&Linkid=http%3a%2f%2fwww.theguardian.com%2flocal-government-network%2f2013%2foct%2f21%2fopen-data-us-san-francisco
[15] https://ec.europa.eu/digital-agenda/en/news/ict-enabled-public-sector-innovation-h2020

are therefore inordinately focused on their everyday tasks, which are increasingly subject to unrealisable targets that are often imposed by multiple funding bodies. While this highly precarious situation is partly attributable to the new "age of austerity", it also reflects earlier rounds of "social innovation", which privileged routine activity over experimental activity (Morgan and Price, 2011). The question for regions and nations now is how to create a management culture which is at once effective in its primary goal, of managing on a day-to-day basis, but which also allows experimental spaces of activity that might appear unproductive in the light of conventional metrics?

3.3 The involvement of civil society, users and citizens

> "New collective experimentations involving multiple stakeholders, including users and concerned parties, have been developed. Although mainly restricted to information technology innovation activities, these initiatives are now spreading to other domains. The terms such as "user-induced" or "community-based" innovation now become widely used to define this tendency". (OECD, 2011:12).

In this section we briefly consider the potential role of civil society organisations, users and citizens in collaborative innovation processes.

> "Civil society is made up of charities, voluntary sector organisations, community groups, social enterprises, and more informal structures such as families, friends and communities." (Young Foundation, 2013).

We look first at civil society organisations, or NGOs, which are increasingly seen as sources of innovation particularly in relation to public services. The view that civil society organisations better represent citizens and communities than do public or private sector organisations because of their proximity and their status of 'trusted intermediaries', is now widely held. However, the relationships of NGO to the State and to the private sector will vary across Member States, according to welfare traditions and historical contingencies, making it difficult to generalise regarding their role(s) in innovation processes. Attitudes to civil society organisations, and thus their perceived legitimacy as bearers of 'the public good' also varies across Europe, as does the willingness of citizens to join such groups (CEC, 2013d). It is widely assumed, however, that in the context of austerity civil society actors (both organisations and individuals) will have to take on a greater burden in terms of public service organisation and delivery (BEPA, 2010) and that they will be part of the innovation process (Rubalcaba, et al, n.d). Wolfe and Nelles (2010) point out that in respect to innovation:

> "…the exact nature and role played by local civic associations and civic actors is more often the subject of anecdotal comments than the object of detailed analysis, and the policy implications drawn from these observations are often based on a few highly visible success stories, rather than the comparative analysis of a large number of cases"

We can think of a number of ways in which NGOs could or are contributing to innovation within an S3 context. First, a RIS innovation strategy which seeks to go beyond STI and to consider processes and services, particularly in relation to pubic good services would seek to enrol NGOs as a stakeholder in the construction of strategies, in addition to private service firms and public sector actors. Even where the main focus remains STI, NGOs could usefully be enrolled in the co-design and diffusion processes: for example, the effectiveness of tele-

health and tele-care technologies are dependent on new organisational practices and user take-up.

Moving beyond the level of RIS, there is now some evidence emerging of important roles for NGOs in areas or particular interest to *SmartSpec.* A recent study of health services in the UK points to the key role played by larger charities such as Age UK and Mind in working with the NHS (Young Foundation, 2013). The study suggests that civil society organisations can contribute to new ways of doing things collaboratively:

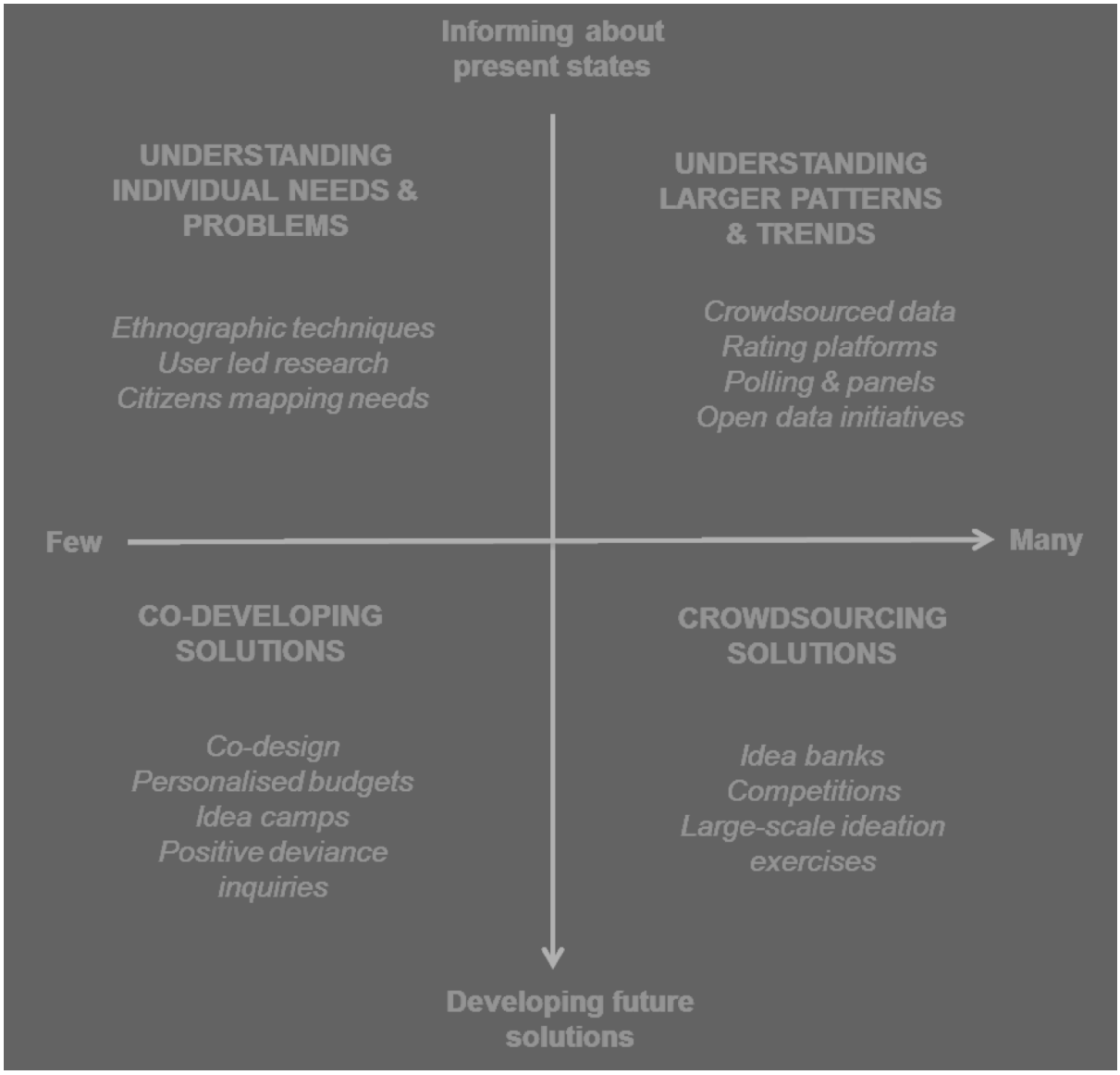
- A broad understanding of need. Civil society organisations have local knowledge, and the ability to give voice to patients and communities.
- Skills and capabilities that the NHS does not have – built environment, personal finance, legal advice, community building, local knowledge, cultural specifics etc.
- Innovative new approaches.
- Capacity to coordinate and mobilise care and support – families and communities are an unseen health service already delivering huge amounts of critical care.
- Up to date information. Organisations and individuals who are in contact with individuals on a daily basis are in the best position to spot issues early and call in support before a crisis develops.
- Trust and credibility in communities that can be hard to reach (Young Foundation, 2013: 4).

A recent study by Rubalcaba and colleagues, which covered a number of Member States explored emerging public-private service delivery networks (what they term ServPINNs). They found that NGOs played an important role in the construction, management and leadership of health sector ServPPINs. They report that "Where present, the third sector organization was invariably the leading organization in the invention network" (Rubalcaba, et al, n.d: 14).

Turning to the wider question of citizens and users, we can identify a number of potential roles for citizens in the innovation process. As regards direct involvement in the construction of innovation strategies, there are a number of examples in Europe of direct involvement in planning and strategizing. In Germany both formal and informal direct participation processes are well developed, such as planning cells (OECD, 2011). Many examples of deliberative democracy involve citizens for whom the question under consideration is directly salient, often immediate, and highly localised. An interesting question is how many citizens would become involved in democratic strategizing processes where the issue under consideration is more abstract and removed from the immediate interests of most citizens, regional innovation strategies being a case in point. One example of a participatory process in regional strategy design which is attracting attention is the Moderna Plan in the Spanish region of Navarra, which involved both NGOs and 1500 citizens in developing the plan.[16] One potential problem with engaging so many users is how one moves between openness and closure at different stages of the planning, and constructing instruments and processes will be crucial. Another issue in the context of S3 is how to prioritize (a key element of S3) amongst competing interests. The Moderna Plan, for example, seems to remain quite a broad strategy.

[16] See: http://www.modernanavarra.com/en/moderna-plan/

Figure 3.2: Mapping citizen engagement activities in the social innovation process



Source: Davies et al (2012: 19 [figure 6])

Participatory co-creation of solutions is also being imagined as an everyday part of the *social* innovation process. A recent Green Paper (Green Paper on Citizens' Science: Citizen Science for Europe: Towards a better society of empowered citizens and enhanced research, CEC, 2013e) emphasizes the role of citizens across the sciences and in all aspects of the innovation cycle. A report by the TEPSIE project has constructed a typology for citizen engagement in the process of social innovation (Davies et al, 2012). The authors point out that different innovation questions will require different approaches. Some involve engaging many users, and thus engagement will be relatively 'shallow', whilst others involve longer-term and deeper engagement (see Figure 3:2 for examples).

The question of how to stimulate collective or collaborative creativity and the role of policymakers in constructing relevant platforms have also been raised (Leitner, et al, 2012). The TEPSIE authors point to the role of digital technologies in helping to understand trends and gather information, through open data gathering techniques, crowdsourcing and so on. The potential importance of digital dialogue, including for

addressing societal challenges, is also emphasised by other commentators (CEC, 2012b; Millard, et al, 2013)[17] and there is a growing 'sub-discipline' paying attention to 'digital social innovation'.[18]

However, citizen engagement can be a difficult process, one that cannot be reduced to consumer involvement. Davies and Simon (2012: 36) warn that:

> "Far from being a simple addition to attempts to address social needs, citizen engagement can be a high-risk activity. There are complex issues related to ensuring that participation is inclusive, and that it is not co-opted by powerful interest groups within a community. Even where it is possible to bring together a diverse range of people who reflect the whole community, the dynamics of group interactions can easily skew the information and ideas that emerge. And where participatory practices do not lead to positive change and are viewed negatively by participants, the resulting disengagement and cynicism can have a long term impact. In addition, some of these findings suggest that there may be cases where the state is incapable or poorly suited to supporting or practicing citizen engagement; there may be inherent tensions between public bodies who are reluctant or unwilling to cede control and citizens who demand greater power".

3.4 Social Enterprise

> "Social enterprise can…be seen as a social construct that can be viewed from varying perspectives and dimensions" (Chew and Lyon, 2012: 4).

As with so many terms and concepts considered in this reflections paper, 'social enterprise' and 'social entrepreneurship' are used in multiple ways to describe different entities. Noya (2009) distinguishes between the ways that social enterprises are understood in the US and in Europe. In Europe (our main concern here) social enterprises are seen as a 'different way' of doing business and are usually located in the third sector (Noya, 2009: 14). Beyond such vague assertions it is difficult frame the concept. A detailed study for the European Commission (KMU Forschung, 2007) illustrated the heterogeneity of social enterprise, both conceptually and in the multiple ways in which the term is applied in the European space. They operate across a range of economic and social activities and may be independent entities or the 'trading arm' of larger civil society, third sector or NGO organisations. There is also a wide range of legal models "which allow different kinds of enterprises to become recognised as social enterprises if they meet a country-relevant 'social finality' criteria (Noya, 2009: 15). Lloyd (2003, cited in Chew and Lyon, 2012) illustrate the complexity of defining the 'sector' even within a single Member State (the UK):

> "They comprise a diverse range of organisational forms such as employee-owned businesses, credit unions, co-operatives, development trusts, social firms, intermediate labour market organisations, community businesses and charities' trading arms – each having particular environmental and organisational distinctiveness (Chew and Lyon, 2012: 4)".

[17] A range of online content reporting the e-participating is available at: http://esummit2012.se/files/show/66/wqjgflkuko

[18] See, for example, http://digitalsocial.eu/about

Attempts have been made to cut through the complexity to establish sectoral commonalities (KMU Forschung, 2007; Noya, 2009). Table 3.1 presents a 'conceptual framework' which pulls out key elements (see BEPA, 2011)

Table 3.1: A conceptual framework for the social enterprise sector

Economic criteria	Social criteria
Directly engaged in production and/or sales of goods or services	Initiatives of citizens with shared aims
Voluntarily created and managed by groups of citizens and enjoy a high degree of autonomy and 'member' voice	Decision making power is not based on capital ownership
Accept significant levels of economic risk	Participatory in nature, with workers and users represented and participating in the management of activities – democratically oriented
Activities require a minimum of paid workers (though may also employ volunteers)	Avoid profit maximising behaviour and have a limited distribution of profit
	Explicitly aim to benefit the community or a specific group of people

Source: BEPA, 2011: Annex 2

As well as being a heterogeneous sector, the social enterprise sector is rapidly evolving, experimenting with new business models since 2008 in response to the financial crisis that radically reduced its public sector grant funding. Three examples will help to illustrate the growing heterogeneity in the sector.

Firstly, some social enterprises are being enrolled into the NPM agenda and undertaking public service planning and delivery (Chew and Lyon, 2012). Depending on grants or contracts to deliver social policy potentially throws into question issues of autonomy and 'member' voice. Potentially, the third sector becomes part of a new bureaucracy, but with contractual entanglements replacing or complementing internal municipal command and control systems. Alternatively, social enterprises along with other third sector organisations are being displaced by new efficiency-seeking contracts. So, for example, in the UK payment by results contracts which seek to ensure value for money, give large private sector organisations an advantage against smaller organisations which have long operated in this social policy space: the current Work Programme is a case in point, with multinational providers such as A4E, Maximus, Ingeus and Serco leading 'delivery partnerships'[19].

Secondly, other social enterprises, such as the UK's mutual financial services providers, have begun to mimic private sector business models; this has been accompanied by new relationships between senior management and the 'shop floor' and with members. In addition these new approaches have often resulted in either *de jure* or *de facto* demutualisation resulting in both the consolidation and retrenchment of an 'alternative' model (Treanor and Farrell, 2013).

Thirdly, new tensions are beginning to appear between old and emergent social enterprise models, particularly in the context of globalisation. These tensions are appearing even in

[19] http://www.dwp.gov.uk/youth-contract/

the celebrated success story of the Mondragón Cooperative Group, which recently allowed its oldest member, Fagor, to go into administration, following a sustained period of losses; a Mondragon Group spokesman was quoted as saying that 'solidarity has a limit' (Johnson, 2013). The message from these three examples is that policy-makers need to look more closely at organisations that describe themselves as 'social enterprises' and carefully consider to what extent – if at all – these organisations can contribute to the S3 policy agenda.

3.4.1 Social enterprise and S3

The foregoing suggests we need to be careful when considering the ways in which social enterprises can contribute to S3. We need to be sensitive to the socio-spatial context when exploring the role of social enterprise in innovation. Its contribution is likely to vary between Member States, depending on a whole series of factors – like its aims and objectives, its value system, the calibre of its leadership and management skills, and its perceived legitimacy in the eyes of government, mainstream businesses and civil society. In short, the contribution of the social enterprise sector cannot be answered in the abstract as it requires empirical inspection. In this section, therefore, we limit ourselves to positing three ways in which social enterprises *might* contribute to the S3 agenda.

First, along with wider civil society organisations, social enterprises could play a larger part in the S3 process, bringing knowledge regarding the interface between the market and the social economy and between the state/public sector and the social economy, as well as reflecting grass-roots relationships with local communities.

Second, social enterprises are increasingly involved in public service planning and delivery and therefore they could potentially play a role in intervention networks. So, for example, they could contribute to Living Labs either in 'social innovation park' settings (see section 4, below) or on the ground, for example in co-designing or translating STI into social housing or other settings (Wintjes, et al, 2013).

Third, they can help to diversify the 'value dynamic' of RIS strategies by introducing new and more capacious conceptions of innovation, conceptions that are more attuned to societal challenges than the traditional STI-based conceptions. Morgan and Price (2011) argue that social enterprises bring new value and practice sets, such as mutualism, collective entrepreneurship and consensual approaches to innovation and development. Drawing on the work of Charles Sabel (2006), they argue that social enterprises exhibit "a shared ethic of inter-dependent contribution, fundamentally different from both traditional ethics of honour and loyalty, and from the modern individualist ethic; and, a formalised set of norms of inter-dependent process management, supplementing and often replacing the informal relations of traditional communities. This process includes iterative co-design and mutual understanding".

Significantly, many European regions already host 'market oriented' social enterprises that exhibit the economic and social criteria outlined in Table 3.1. Markets may be local, national or international. Enterprises may be leaders in niche global markets or (more likely) operate as partners in global supply chains, either in the private sector or in co-operative partnerships (Morgan and Price, 2011; Calzada, 2013). In theory, market extension opportunities are open to 'market oriented' social enterprises as they are to other SMEs, bolstered by new electronic media. Calzada (2013) points to the Mondragón case as an example of such a global approach, but suggests that frameworks and tools for

generalising such a model are underdeveloped. A range of questions emerges in the context of entrepreneurial search here. For example, does a region ignore the value system of the social enterprise and merely judge it on an 'excellence' criterion? What weight is attached to process or organisational potential and what to product innovation? Does it focus on promoting small co-operative linkages on a global scale (a developmental approach) or on large social enterprises already operating successfully in mainstream social markets (a reinforcement approach)? Which sectors and activities should it support? For example, social enterprises are a significant player in 'alternative' food chains, but are these fertile fields for innovation and what are the regional benefits? An additional question is *how* to support these various endeavours. Of course, it is likely that some European regions will not have a rich diversity of market oriented social enterprises and thus these questions may not arise.

There are of course many barriers to social enterprises contributing to the S3 process. Although social enterprises are generally seen as innovative business models that meet both social and economic objectives (Noya, 2009), there is very little empirical evidence to support the view that they are particularly innovative in and of themselves (Morgan and Price, 2011; Chew and Lyon, 2012). For example, Morgan and Price (2011: 23) identify three constraints that have stymied the innovative capacity of the social enterprise sector in the UK:

- *Leadership constraints*: leadership capacity is in short supply because many social enterprises tend to be over-dependent on original founders and individual leaders; and when they leave the organisation, the enterprise cannot sustain itself.
- *Management constraints*: the sector suffers from a shortage of management expertise across the skill spectrum.
- *Funding constraints*: constraints on internally generated funds are compounded by the fact that the sector does not register on the radar screens of conventional banks and alternative forms of social finance have been slow to materialise.

4 SOME THOUGHTS ON EMERGING SOCIAL INNOVATION TRENDS IN RIS POLICY AND PRACTICE

Regional strategies that incorporate social innovation in a formal way are only now beginning to emerge, according to the European Commission, and these examples are limited to a small number of Member States (CEC, 2013a: 46). However, there has been a "wide range of dispersed, uncoordinated experiments involving various stakeholders in different learning spaces" in and beyond Europe (OECD, 2011:11). While the S3 process appears to be stimulating strategies that go way beyond the conventional STI paradigm, it is not yet clear how this is playing out in practice. For example, an initial search of the Eye@RIS3 – the JRC monitoring website[20] – shows that several regions have highlighted the EU *social innovation priority*, but more work is required to uncover whether this concept is being adopted in a common way. Other regions have highlighted *public health and well-being*, but this might also fall under the social innovation umbrella. Still others have prioritised *service innovations* which might also come under the rubric of social innovation.

This suggests that the 'quasi-concept' of social innovation may have its limits in policy and practice terms. In this section we briefly describe some of the experiments that seem most pertinent to our study. However, this section comes with a health warning because policy-related literature on social innovation often takes the form of 'case-studies' and 'stories' that comprise 'analysis-lite' snapshots, which tell us little or nothing about what happens when the pilot funding runs out and the experimenters move on. While these approaches are useful in cataloguing experiments, they often have less utility in informing us what actually works, what fails and why. The celebratory approach of many social inclusion evangelists does not help. In the context of RIS3 a group of regional 'usual suspects' has already emerged and this is reflected to some extent in this section. Our empirical research will draw on some of the regions taking a lead in policy innovation, but it will also cover regions where social innovation has been "arrested" for one reason or another.

Where societal challenges are involved, regional policymakers will need to give direction as to what the priority areas should be. Structures will need to be put in place to legitimize these priorities and to ensure that they are realized. If we focus, for the moment, on the STI element of societal challenges, we can perhaps draw on the example of RISTEX (Research Institute of Science and Technology for Society), part of the Japan Science and Technology Agency, which was specifically established to support R&D through a cycle of activities from identifying social problems, establishing R&D focus areas, promoting R&D, producing and experimenting with "proto-types", and assisting the application of "proto-types" to wider areas (OECD, 2011: 45). According to the OECD, "RISTEX aims to invite research applications that have clear social missions and clear ideas of how to cooperate with a variety of local actors, local government officers and researchers" (OECD 2011: 50). A question for our research is whether such specialist (sub) agencies are required to address socially-inflected STI, whether and in what shape these are emerging, and how they contribute towards S3.

4.1 Emerging collaborative processes

The RIS3 process also seeks to build innovation partnerships, stating that the process of 'entrepreneurial search' should foster "stakeholder engagement (private sector, public sector

[20] http://s3platform.jrc.ec.europa.eu/map

and non-profit sectors) under a shared vision, link small, medium and large firms, encourage multi-level governance, and help build creative and social capital at the community level." The idea of collaborative partnerships in regional economic policy is not, of course, new. The best known model for such arrangements is perhaps the 'Triple Helix', which privileges the Industry-State-University nexus as the key knowledge partners (e.g. Etzkowitz and Leydesdorff, 2005). The enrolment of NGOs, the third sector, social enterprises, as well as other parts of civil society in regional innovation processes is, however, far less developed. The same is true of engagement with social citizens and end-users of innovation. Although new more inclusive approaches are emerging, these are often fragmented and isolated rather than being part of coherent territorial strategies.

Perhaps the most promising model in the context of regional innovation is the Quadruple Helix (QH), which builds on the Triple Helix (TH) but:

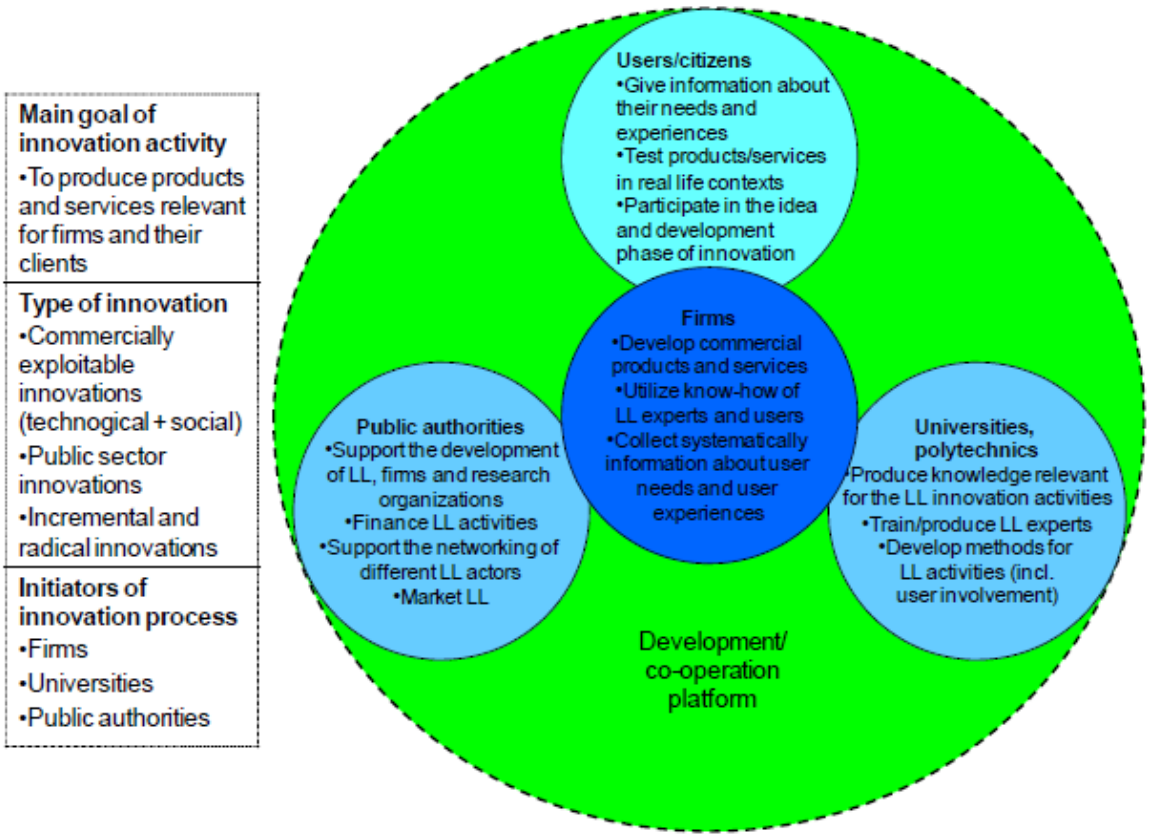
> "represents a shift towards systemic, open and user-centric innovation policy. An era of linear, top-down, expert driven development, production and services is giving way to different forms and levels of coproduction with consumers, customers and citizens." (Arnkil, et al, 2010: i).

However, the extent to which this QH model has been translated into practice is not at all clear. Arnkil et al (2010) suggest that the concept is not yet well established or widely used in innovation research and policy. These authors also demonstrate that there is considerable variation within the model, with a continuum ranging from what might be termed *TH-plus* to more radical developments. Although all models involve users, there are multiple conceptions as to what constitutes a user. The authors distinguish between 4 types of QH. These are: 'firm-centred', university-centred, public-sector-centred and user-centred models (see Figure 4.1). Ideally these separate models would be coordinated through local-regional public authorities.

Another emerging concept for brokering collaborations is the 'living laboratory'. In the European context this has been given additional prominence by the European Network of Living Labs (ENLL).[21] Living Labs (LL) are still in their formative stage and, as yet, are under-defined and under-researched (Arnkil et al, 2010; Almirall and Wareham, 2011), but are being associated with the QH model. Galbraith and McAdam (2011: 5) for example describe LL as "new quadruple helix innovation intermediaries". The European Commission has characterised them as Public-Private-People Partnerships (PPPP) for user-driven open innovation.[22] Living Labs operate in a range of domains, including areas of interest to our work at the interface of economic and social innovation such as healthcare and energy efficiency and inter-link other forms of innovation intermediaries such as science parks and incubators, but the nature of these relationships is under-researched (Almirall and Wareham, 2011). Other emergent innovation intermediaries which may be relevant foci for empirical research are Social Innovation Parks (SIP) which have a 'social mission' and "support diversified innovative activities, such as firm or organization development, knowledge transfer, social technology progress, educational and training programs and entrepreneurship services" (Lundström and Zhou, 2011: 143). As with QH and LL, the SIP concept is an emerging phenomenon and there is no single model in practice.

[21] A European network of living labs with a developed governance structure and work plan http://www.openlivinglabs.eu/
[22] http://www.openlivinglabs.eu/aboutus

Figure: 4.1: Firm-centred living lab model



Source: Arnkil et al (2010): Exploring Quadruple Helix

One of the distinguishing aspects of S3 is its attempt to shed the STI bias. Even so, most of the analysis of these emergent new innovation spaces suggests that the STI paradigm continues to loom large. In their analysis of the new QH trend, Arnkil et al (2010: 2) conclude that there is still "a bias towards support for technological innovation and policies, and measures for supporting "user-driven" innovation are only in their infancy. So far there are only a few examples of how to integrate users systematically in the innovation processes by means of innovation policies". Lundström and Zhou's analysis of SIPs in Asia, the US and Europe, however, suggest that most parks are essentially social technology parks, "focusing on traditional technological and business objectives" but with a "social missions" perspective (2011: 143). These authors do not preclude the possibility that different models might also emerge and they cite the Social Innovation Park Ltd in Singapore, which acts as an incubator of social enterprises which "strive to make a major impact for a robust and dynamic social entrepreneurial community both locally and globally".

Arnkil and colleagues note that:

> "numerous challenges related to the transition from old research- and technology-driven innovation models (incl. the TH model) to more user-oriented innovation models. Some of these challenges are more connected with enterprises, others with

universities, public organizations and users. This is a huge cultural change – be it in the public or private regime."

An important question for our research is the extent to which new spaces of collaborative innovation are developing in the context of RIS3.

4.2 Societal challenges as the response to S3?

> "Today's social challenges are numerous, complex, and urgent, from ageing societies, climate change, to energy efficiency and security...[but]…there is a clear lack of exploitation of innovative solutions to address these social challenges. Failing to mobilise innovation to address some of the issues that affect populations at the global and local level has very high opportunity costs. Social innovation can be a way to reconcile these two forces, bringing growth and social value at the same time" (OECD, 2011: 7-8).

The notion of societal challenge suggests that "solving societal problems is becoming an important driving force to innovate, for both companies and individuals" (Leitner, et al, 2012). This is reflected in the second part of BEPA's three part definition of 'new' social innovation, which highlights the idea of societal challenges "in which the boundary between the social and the economic blurs" (10). This view is supported in the above quotation from the OECD's *Fostering Innovation to Address Social Challenges*[23]. The societal challenge approach is said to be particularly relevant now for a number of reasons:

- the fact that today's challenges are among the most complex and threatening ones mankind has faced;
- increasing demand from society to get 'value for public money' in terms of societal benefits;
- the threatened competitive position of Europe on the global stage which is forcing policy makers at the highest political level to reflect on new modes of stimulating sustainable growth;
- the continued fragmentation and lack of coordination in Europe across policy domains and policy levels which an approach based on grand challenges could help to address[24]

This is taken forward in *Horizon 2020*, which commits around €30bn of its €80bn budget to societal challenges[25]. The societal challenge themes of *Horizon 2020* are defined as:

- Health, demographic change and wellbeing;

[23] A note of caution, however, must be added here. We cannot innovate ourselves out of the deep-seated structural problems which society faces. For example, the disconnection between economic growth and well-being, referred to in the OECD, is perhaps better explained by the secular trend towards the redistribution of wealth from the poor, and now from the 'squeezed' middle, to the already rich, rather than on a failure to innovate. Social innovation can help to address these problems, but on its own it is more likely to be ameliorative rather than transformative.

[24] http://i3s.ec.europa.eu/commitment/10.html

[25] See http://ec.europa.eu/research/horizon2020/index_en.cfm?pg=h2020. Last accessed 14.11.13

- Food security, sustainable agriculture, marine and maritime research, and the bio-economy;
- Secure, clean and efficient energy;
- Smart, green and integrated transport;
- Inclusive, innovative and secure societies;
- Climate action, resource efficiency and raw materials.

The societal challenge perspective acknowledges the deep and widespread problems resulting from certain social trends, but also places an emphasis on the *opportunities* associated with such challenges (BEPA, 2011; CEC, 2010b). BEPA describes them as a 'triple triumph for society and individuals, for governments and for industry (2011: 9). Addressing these challenges will require multi-member partnerships, whether at the European level (where several European Innovation Partnerships have been established[26]), or at the national or regional levels, as envisaged in *Horizon 2020*. Technological innovation and diffusion are regarded as critical in addressing societal challenges and the Digital Agenda now focuses on societal challenges, including areas of direct concern *to SmartSpec*, namely healthcare, independent living for the elderly, delivering effective public services (CEC, 2012d). The societal challenge perspective will also be an important feature of Cohesion Policy in the 2014-2020 programming period. Of most relevance to our work is the EU policy requirement that regional visions should include a justification of their relevance to societal challenges; these regional visions should also recognise that:

> "Smart specialisation strategies can…be a powerful instrument to tackle social, environmental, climate and energy challenges, such as demographic change, resource efficiency, energy security and climate resilience" (CEC, 2013, d)

This EC perspective reflects and reinforces the view of the OECD, which argued that:

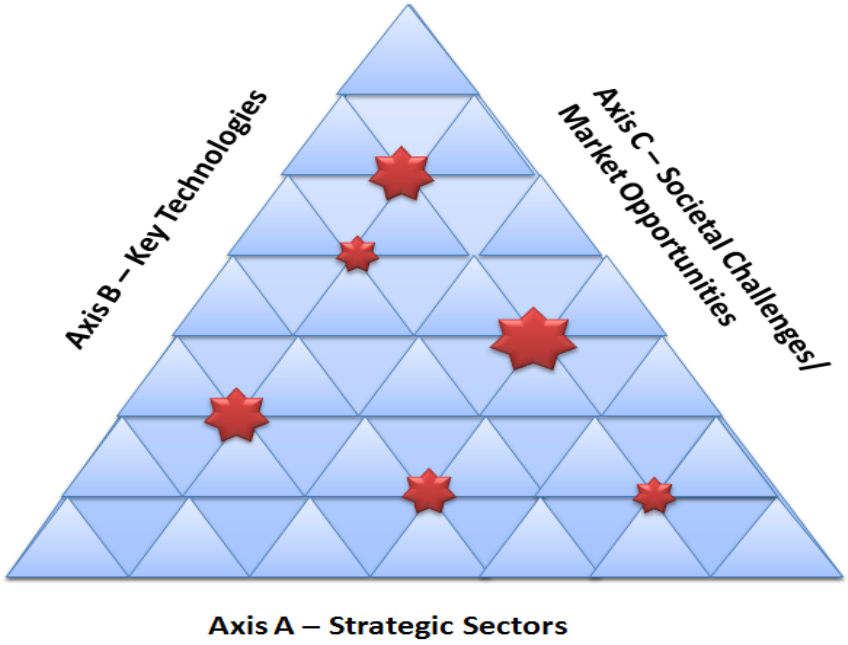
> "There are business opportunities and synergies to be exploited by better integrating social challenges at the core of innovation activities. Social challenges have a strong mobilising effect, which would allow unprecedented gathering of competences and resources, beyond institutions, sectors and discipline boundaries" (OECD, 2011:8).

Although it is a relatively new policy concept, the societal challenge is already becoming a key principle in a number of regional strategies, though it is not clear whether the concept is being translated in the same way in each region. One of our key questions will be whether these expectations will be met. For example:

> "…will the smart regional specialization be aligned with the new expectations in the field of societal challenges? In other words, is the concept just a way to support a growth agenda or can it also be a path for quality development based on sustainable and social development requirements?" (EURADA, 2011: 10)

[26] http://ec.europa.eu/research/innovation-union/index_en.cfm?pg=eip

Figure 4.2 Integrating a Societal Challenges Approach toS3



Source: Adapted from Lower Saxony Region RIS

Figure 4.2 illustrates one approach to integrating a societal challenge approach into S3. The figure schematizes the point where 'entrepreneurial search' has identified the region's strategic sectors, its technology product or activity 'niches' and how these might align with societal challenges and create market opportunities. As it is drawn here, the figure suggests a technology-based approach to the societal challenges. Here the technological elements to address societal challenges could be exported and used within the region. The figure does not give a flavour of potential multi-stakeholder processes which may be brought to bear. We explore this point further in Section 4.4, where we examine a particular societal challenge – the ageing society.

4.3 Ageing as a key societal challenge

There is now overwhelming evidence of global population ageing. The World Health Organization estimates that between 2000 and 2050, the proportion of the world's population over 60 years will double from about 11% to 22%. The absolute number of people aged 60 years and over is expected to increase from 605 million to 2 billion over the same period. In addition the number of people aged 80 years or older will almost quadruple to 395 million (World Health Organization, 2012). Although the pace of ageing is currently fastest in the developing world, the process is most advanced in western economies and Europe has the oldest population of all global regions, at around 22 per cent aged 60 or over: this figure is anticipated to rise to 33 per cent by 2050 (UNFPA, 2012) .

Unsurprisingly, then, ageing has been recognised as a key societal challenge globally (World Economic Forum 2012) and in Europe (Active Ageing)[27]. This brings societal costs. So, for example, it is anticipated that 'healthy life years' will be extended, but not in line with life expectancy rates. The number of those living in some form of dependency will therefore

[27] "Active ageing means growing old in good health and as a full member of society, feeling more fulfilled in our jobs, more independent in our daily lives and more involved as citizens." http://europa.eu/ey2012/ey2012main.jsp?catId=971

grow. It is estimated that those in long-term care will increase globally (OECD, 2011) and in Europe it will grow by 100% by 2060 (CEC, 2012d). An ageing population will clearly impact on how health and social care services are paid for and delivered, but it will also have a major impact on other public and private services. It will also impact on productive resources. So, for example, in the field of employment, the European Statistical Office projects that "by 2060 there will be only two people of working age (15-64) in the EU for every person aged over 65, compared to a ratio of four to one today" (Eurobarometer, 2012). The precise ratios may change if current trends towards longer working are taken into account, and if the decline of social and health services continues, but the fundamental point of societal ageing remains.

Governments are now (slowly) responding to the issues associated with ageing, though not necessarily through the multi-layered and multi-level comprehensive policy approaches required, including pensions reform, active and inclusive workplace strategies, new approaches to housing and transport, new urban infrastructure and so on. Although the challenge of ageing is not one of Europe 2020's five priorities, there are several indications that the topic will be high on the agenda over the coming years. For example, 'health, demographic change and wellbeing' is one of the key themes of *Horizon 2020* and the first pilot European Innovation Partnership is on healthy and active ageing, building on a range of previous initiatives such as the European Year of Active Ageing 2012, ICT for Independent Living and Inclusion, and the Joint Programme on Ambient Assisted Living. Ageing is a global challenge and the World Health Organization has developed an 'age friendly cities' programme[28] whose membership crosses continents and includes a number of cities in Europe[29].

In line with other societal challenges, the issue of demographic change and ageing is increasingly portrayed both as a threat and an opportunity. *Economic* opportunities emerge in a number of ways. Examples include:

- Expanding and improving the labour pool: as people live longer, and as pension entitlements diminish, more people are likely to wish/need to stay in paid work for longer. Assuming that relevant policies can be put in place, this process creates an additional resource to foster growth (CEC, 2012d)
- The potential growth in volunteerism, both in familial and wider societal settings: at least a proportion of older adults is likely to engage in these processes, thus freeing up younger people for employment in the formal economy. A cadre of volunteers will also be essential to some of the social innovations envisaged by policymakers (CEC, 2012d).
- The potential for older innovators and entrepreneurs. This will require concerted action, as those over 50s and particularly those over 60 are less likely to establish their own businesses, but may be more likely to do so where business requires low capital input (Stumbitz et al, 2012).
- The creation of new markets: As Europe's population ages, and the older population makes up a greater percentage of consumers, different product and service demand patterns are likely to emerge. This opens up new areas for innovation and adaptation. One estimate puts the current European 'silver economy' at €3trn[30]. In addition there

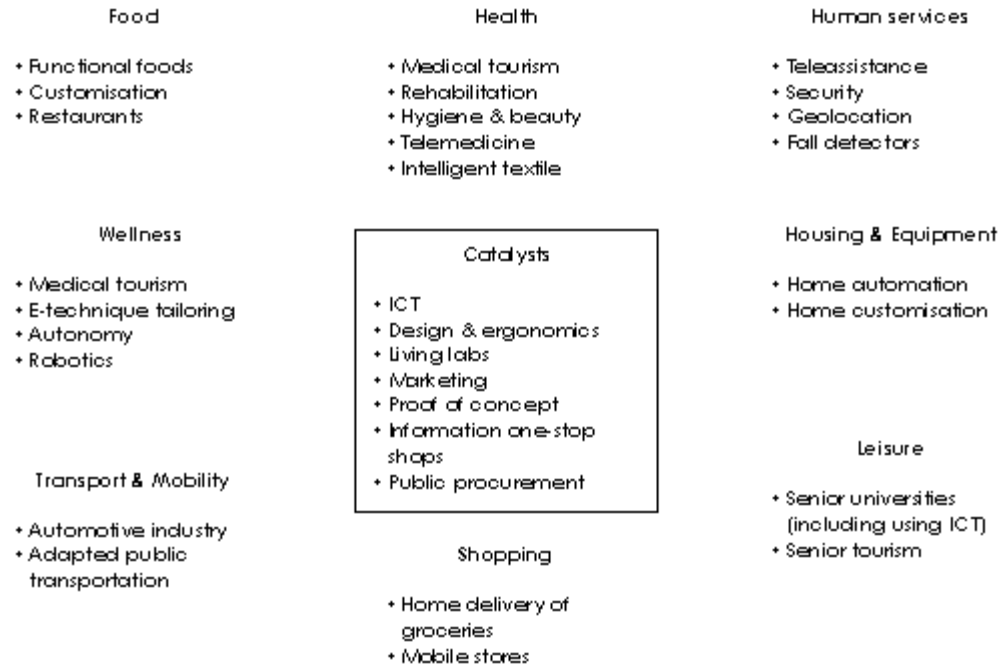
[28] http://www.who.int/ageing/age_friendly_cities_network/en/
[29] http://europa.eu/ey2012/ey2012main.jsp?catId=973&langId=en
[30] Neelie Kroes (2013) 'Innovation isn't just for the young'. Speech to AGE Platform Europe General Assembly /Brussels, 17 May 2013, by the Vice-President of the European Commission responsible

are ageing markets in countries beyond Europe, including rapidly developing and 'newly rich' economies. This presents market opportunities for new products. For example, global spending on drugs is expected soon to exceed $1tn (FT, 19.11.13) and there will be a burgeoning demand for new, cheaper and more effective cures.

- There are a number of variables which will affect the size of this market. Two of these factors are the wealth of future older 'generation cohorts'. It cannot be assumed that future life-cycle accumulated wealth will replicate the patterns experienced by the so-called 'golden generation' or that the level of pensions will remain as high (Rowlingson, 2011). Nor can it be assumed that governments will be prepared or willing to pay for long term care and health (OECD, 2011). Furthermore, if current regressive redistribution patterns (across the life-cycle) persist, then wealth will be more tightly held by a smaller set of the older population, thus narrowing markets.

Focusing on the market opportunities, Figure 4.3 imagines an 'elderly' cluster and the range of goods and services which could be required to service this market. A number of these issues is being discussed in age friendly initiatives and smart cities frameworks[31]. This 'cluster' could be applied at multiple territorial levels, though clearly not all regions will have the capacity to innovate in all these areas. Furthermore, under an S3 approach regions would need to make choices based on potential market niches which have potential to become part of a global supply chain.

Figure 4.3: Market opportunities for a regional response strategy ('Elderly Cluster')



Source: EURADA (2011: 34)

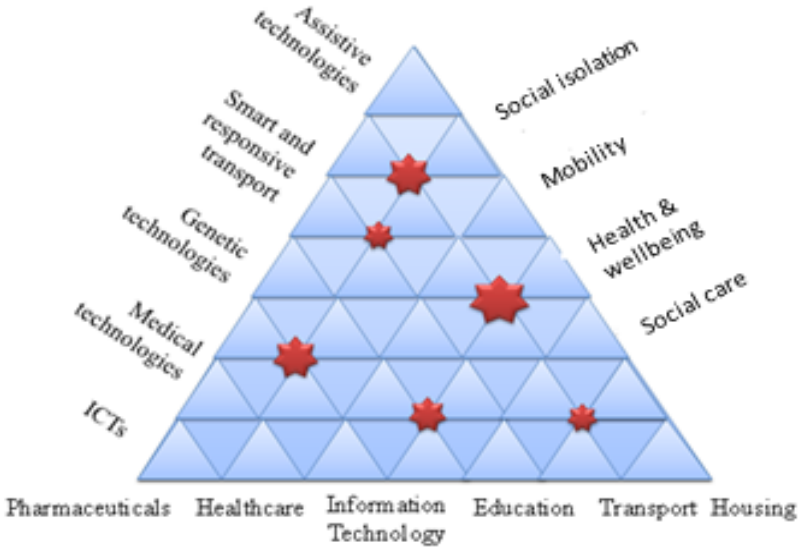
Figure 4.4 provides a hypothetical illustration as to how a societal challenge approach could be incorporated in the RIS3 process. Again, this focuses mainly on the technological side, highlighting some clusters and technologies that could help address societal challenges. It is

for the Digital Agenda. Speech 13/40 http://europa.eu/rapid/press-release_SPEECH-13-430_en.htm Last accessed 14.11.13

[31] See for example https://webgate.ec.europa.eu/eipaha/actiongroup/index/d4

unlikely that many regions would have the requisite capacity on Axes A and B, i.e., the cluster and technology capacities, to address all the issues on Axis C, issues which most European regions will be facing. As we can see, this is essentially an output model, framing social innovation as a means of addressing a social issue through technology. In our study we will be interested to find which social innovation processes – if any - are involved in reaching these ends.

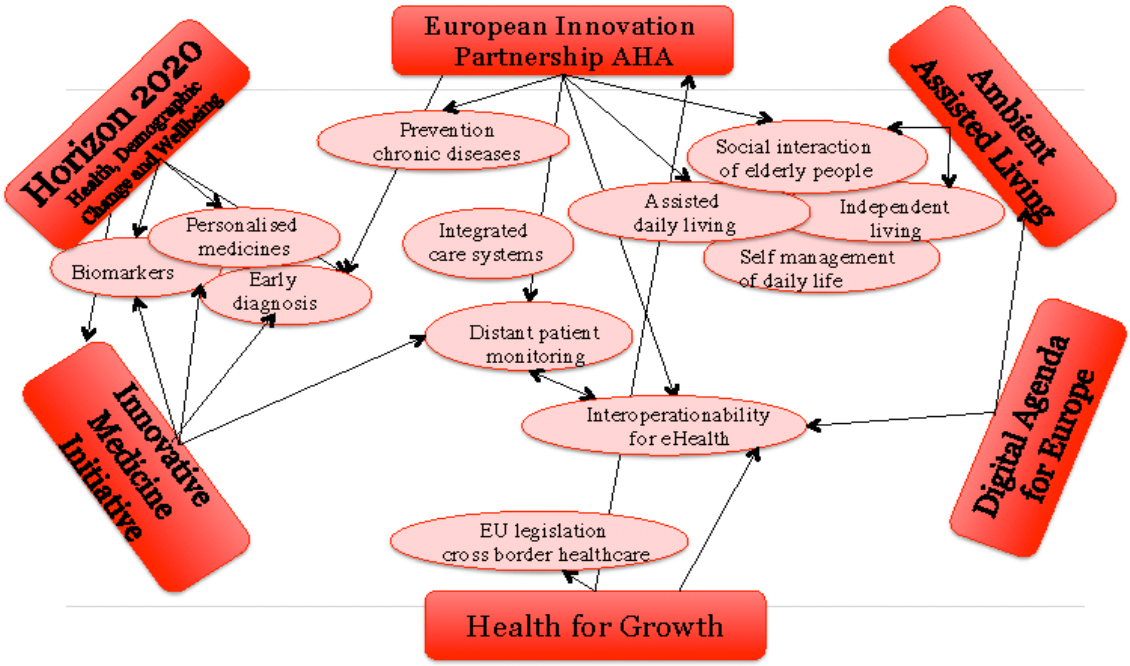
Figure 4.4 Integrating a Societal Challenges Approach to S3



Source: the authors

We can explore this from a hypothetical 'use case' in relation to figure 4.5. This figure is designed to demonstrate a conceptual joining up of a health and personal care system. As would be expected, the main focus is on medical and digital *technologies*. This is unsurprising given the focus on technology – particularly digital technologies – in EU ageing research (see CEC, 2012a and 2012b). If we look at the top right quadrant, however, addressing the problem of independent healthy living at home or close to home requires multiple elements that need to be properly calibrated (Blaschke, et al, 2009). On the one hand, citizens, users, citizens representatives, firms, health and care organisations, including the many social enterprises which operate in health and care, and, paid-for and non-paid for carers might all contribute to creating 'robust social knowledge' on the input side, co-design and so on. Collaborative and 'collective' intelligence could also be galvanised in terms of integrating products into organisational systems, training workers and users and so on. Such processes could be organised around a regional living lab perspective. Of course, we are not thinking about a closed regional system. Since many of the actors in producing assistive technologies (such as Tunstall) are global multinationals, a region is more likely to be a node in a European or global network.

Figure 4.5: Schematic of Health Policies at European Level



Source: Boekholt (2013)

There are, however, wider matters which need to be addressed at the national or regional level. To stay with the example of living-longer-at-home policies, a key question is how care organisations and social housing organisations are compensated for taking on a burden which was once carried on in larger institutional settings. How are the various elements of a 'social innovation' turned into sector wide 'organisational and cultural innovation' and how are concomitant funding streams (financial innovation) calibrated with new regulations (legislative innovation)?

Such collaborative processes require long-term and deep working, the results of which may not come to fruition immediately. It also requires a 'coalition of the willing'. Constructing such a coalition is not easy. One of the key questions in our research is how such coalitions are constructed and the barriers to doing so. One (under-utilised) tool in the regional policy repertoire is *public procurement*, the power of purchase in the public sector (Morgan and Price, 2011). The European Commission has called for more innovative approaches in which the public sector becomes a 'lead partner' in the design of procurement policies that include "pre-commercial type procurement as well as Innovation Partnerships" (CEC, 2010a: 9). Public bodies are also enjoined to encourage innovation in the social sphere through innovative and cross-sectoral partnerships (CEC, 2013a). A number of Member States are now trying to design more innovative procurement policies. For example, the UK has sought to broaden the parameters of public procurement by introducing the concept of *social value*, which is defined as[32]:

[32] The Public Services Social Value Act came into law in March 2012 and 'went live' in January 2013. For details see: http://www.legislation.gov.uk/ukpga/2012/3/enacted

> ".. a way of thinking about how scarce resources are allocated and used. It involves looking beyond the price of each individual contract and looking at what the collective benefit to a community is when a public body chooses to award a contract." (Social Enterprise UK (2012: 2).

Some European cities and regions are already applying social clauses to public tenders in sectors such as food, energy, transport and housing (Morgan and Sonnino, 2008; Morgan and Price, 2011). Following changes to the national rules on procurement, the French city of Nantes introduced labour market inclusion conditions into its procurement of public works (CEC, 2013a). Similarly the Catalan Region and Barcelona City[33] have applied social clauses in procurement for all its large contracts to integrate groups at risk of exclusion in the labour market. The City is also applying social return on innovation (SROI) methods[34] to some of its services including Home Care Services aimed at keeping people at home longer.[35] This application of SROI is becoming more widespread.[36] A key question for our research is whether and how such new procurement practices can be introduced to encourage the interface between social and economic innovation. In its simplest form, this could involve agreement to *beta- test* say assistive technologies in community settings.

More ambitiously, procurement could actively seek out tenders from cross-sectoral partnerships committed to exploring the co-design of products and services through the innovation cycle. This, of course, is not easy. Evidence from Wales suggests that the public sector is especially risk averse in the field of public procurement (Morgan and Price, 2011). Indeed, this appears to be the case more generally in the UK, where the Social Value Act (see above) is struggling to make a difference because the vast majority of local authorities are still privileging narrowly framed 'value for money' criteria when they award contracts (Marsh, 2013).

[33] Cities for Active Inclusion (EUROCITIES-CfAI) is a network of nine European cities each establishing a Local Authority Observatory (LAO) within its administration. Their aim is to share information, promote mutual learning and carry out research on the implementation of the active inclusion strategies at the local level. http://www.eurocities.eu/eurocities/activities/projects/Cities-for-Active-Inclusion

[34] SROI is becoming increasingly popular; see, for example, New Economics. http://www.neweconomics.org/teams/entry/valuing-what-matters

[35] Cities for Active Inclusion: Implementing and active inclusion strategy through a socially innovative plan. Barcelona Visit, 5-6 June 2013, Summary report. http://nws.eurocities.eu/MediaShell/GetMediaBytes?mediaReference=4083 Last accessed 17.11.13

[36] See, for example, New Economics. http://www.neweconomics.org/teams/entry/valuing-what-matters

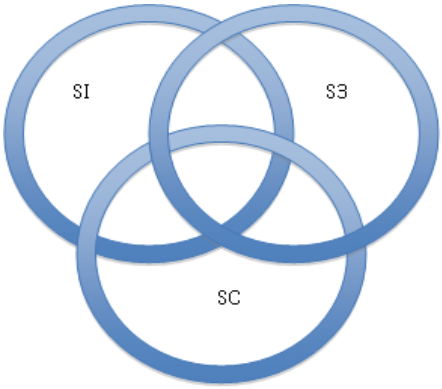
5 CHALLENGES IN INTEGRATING SOCIALLY INNOVATIVE PROCESSES INTO S3

The S3 process faces seven key challenges: the "prioritization" challenge, "stakeholders engagement" challenge, the "policy mix" challenge, "multi-level governance" challenge, the "cross-border collaboration" challenge, the "smart policy-making" challenge, and the "policy capacity" challenge (Nauwelaers, 2013). Since all these challenges resonate for social innovation – defining the scope for as well as the barriers to social innovation - this section addresses the implications of these challenges.

5.1 The Prioritization Challenge

One of the issues which regions will face in incorporating S3 into the policy process is how to select and justify priority intervention and how to put an entrepreneurial discovery process in motion. The challenge of selecting priorities will be that much greater if the region is genuinely committed to adopting a societal challenge approach or other SI-inflected approaches. A key question here concerns how regions are interpreting and bounding the notion of social innovation within their regional innovation systems. The early tentative evidence from our study is that regions are approaching the notion of social innovation through the prism of the societal challenge approach. However, the societal challenge is only one approach to social innovation. Furthermore, as the EU Guide to Social Innovation (CEC, 2013a) stresses, social innovation can be about process, strategy or governance. So how are regions planning to incorporate this complexity? Even if we limit ourselves to the societal challenge perspective, it is not clear how the entrepreneurial search processes are to be progressed. One approach would be to view societal challenges as global challenges and from thence to establish which industrial activities in one's region are able to address those challenges. This is most likely to be a STI based approach focusing on leading technologies, but focused on 'bi-focal' technologies which satisfy both business and social goals (Pol and Ville, 2009). The question here would be what specialisms does a region have with the 'potential for excellence within European and global value chains' (CEC, 2013d)? Here there is no reason to suppose that activities such as drug development would have particular links into its host region or at least into user engagement. In theory, discovery could involve identifying service activities which had the same potential.

Figure 5.1 Schematizing the relationship between S3, SI and SC



Source: the authors

In areas such as healthcare or technology for older adults, a complementary approach might be to construct a consortium which could add value to the first approach by integrating production and service excellence into regional health and social care ecosystems in a systematic way. The problem may be that, while all European regions face an ageing challenge to some degree, many are unlikely to have specialisms in sectors which address older people. Is the RIS the appropriate policy vehicle to address wider forms of innovation required in relation to societal challenges or are there more appropriate vehicles? Of course, 'entrepreneurial search' is not just a technocratic process, but also a political one. One political question will be: under what circumstances should societal challenges be prioritised over other activities of existing or potential excellence? As EURADA has warned, agreement on priorities is already difficult:

> "There is not a single regional stakeholder who will ever oppose the sturdy notion of focusing public resources on action with strong added value…until final beneficiaries are chosen" EURADA (2011: 10).

Another (or complementary) approach would to be focus resources in research excellence across a range of societal challenge approaches through models such as QH and SIPs, with the intention of developing niche areas of excellence. Of course, this would need to be preceded by a collaborative process of 'entrepreneurial and social' discovery.

5.2 The stakeholders engagement challenge

In Sections 3 and 4 of this reflections paper we emphasised the collaborative nature of new innovation processes and focused on particular actors who would need to concert themselves to design and deliver agreed strategies. Our early research suggests that, by paying attention to social issues, politicians may be more inclined to embrace regional innovation and S3 more readily[37], and may help in galvanizing multiple actors. We know from both the RIS and SI literatures that such processes are neither straightforward nor easy. This view is supported by the OECD, which says that: "The development and diffusion of social innovation faces the traditional and well-established frontiers between disciplines, sectors, as well jurisdictional boundaries in government and administrations" (OECD, 2011: 9).

An additional challenge is the inclusion of civil society organisations and end-users into this process and innovation "that aims directly to address social challenges must cope with specific barriers that cause under-investment and hinder their development and diffusion. Most of these barriers relate to the multidimensional and multi-stakeholder nature of social challenges." (OECD, 2011: 9). There are also specific questions about how and when users should be incorporated into innovation processes. The European Commission suggests that these actors should be involved from the outset, but this has the potential for ideas overload and inertia unless the appropriate structures and instruments are in place. Furthermore, as we argued in section 3.3, users are not a homogeneous group, so flexible approaches would be required. Our research will consider how this issue is being addressed.

[37] This was one of the key messages which emerged from the floor in the afternoon session of the *Smart Specialisation for Regional Innovation, Towards better practice* Conference, European Parliament, Brussels, 7th November 2013

5.3 The 'policy mix challenge'

Although the policy mix challenge is addressed in WP4, of particular interest to WP2 is what policies are being developed to integrate social innovation into RIS, from both the outcome and process perspectives. Meeting social challenges calls for innovative solutions at all levels, from the micro-level of individual action to macro systemic solutions. Public involvement has an essential role to play to initiate this paradigm shift and to integrate social value into incentives mechanism for innovation. Policy makers are asked to be innovative themselves to provide new support mechanisms and instruments (OECD. 2011). But what policy instruments and what policy mix options are emerging? For example, is the current focus on short-term goals and targets, attached to time-limited and silo-based budgets, the most appropriate for integrated and collaborative approaches to innovation? Of particular importance in the policy mix equation is the scope for financial innovation: to what extent will socially attuned funding be forthcoming to address societal challenges when the conventional banking market tends not to view and value this sphere as an attractive proposition? In addition to EU funds, a number of social innovation funds are now beginning to emerge from the (quasi) public sector (e.g., Centre for Social Action)[38] and through new financial instruments, such Social Impact Bonds supplied by social entrepreneurs in the private sector (Mulgan (2013).[39]

5.4 Multi-level governance challenge

Collaborative innovation will rely on successful working of governance at multiple territorial levels. We anticipate that many of the barriers to pursuing collaborative innovation at the regional and local levels will relate to policy silos at the national and European levels as much if not more than at the sub-national level. Efforts are being made at the EU level to develop a more holistic approach – for example, integrating Structural Funds instruments – but, by the nature of their competencies and responsibilities, DGs tend to operate independently, if not in conflict, with one another. At the Member State level, regional capacity to innovate may well depend very much on the balance of competences between national, regional and local policymakers. Collaborative innovation will therefore depend on the extent to which the multi-level polity can practice what it preaches and act in a concerted manner.

5.5 The 'cross-border collaboration' challenge

When regions are understood in relational as well as territorial terms, it is no easy task to specify the most relevant spatial scale for social innovation policy, or indeed for any kind of innovation policy. This generates some very difficult political questions. For example, "how can S3 be designed and implemented in regions with strong cross-border dynamics to ensure the benefits from synergies between strategies and policies?" (Nauwelaers, 2013). Although this question is often raised in the context of the STI policy paradigm, where globalised firms are key actors, it is rarely posed in the context of social innovation, where actors tend to be tethered to and embedded in their local civil societies. From the perspective of WP2, one of

[38] http://www.nesta.org.uk/news/centre-social-action%C2%92s-%C2%A314m-innovation-fund-opens-applications

[39] See also Braithwaite (2013) "Social Impact Funds from Goldman Sachs and 'double bottom line'. Financial Times 3.11.13 http://www.ft.com/cms/s/0/d7086aee-4493-11e3-a751-00144feabdc0.html?siteedition=uk#axzz2jh92IRyF

the key questions will be whether regional actors are cooperating beyond their own regions to draw on good practice from elsewhere, particularly with respect to healthy ageing for example, a challenge for all regions. One advantage which this 'sector' may have is that older adults are well represented by civil organisations operating across the European space (e.g. the Age Platform). A critical question for our research is whether and to what extent regions are drawing from, and building upon, these cross-border collaborations and other cognate projects, such as the Ambient Assisted Living Joint Programme. Senior citizens who are unable or unwilling to undertake physical travel, are increasingly prepared to experiment with social network technologies - from simple systems like Skype to other more sophisticated tele-presence systems – so that they can "be there" socially without being there physically.

5.6 The 'Smart Policy Making Challenge'

Arguably, one of the most neglected aspects of policy design is measurement, a problem that is compounded when unconventional policies like social innovation is factored into the policy mix. As the OECD points out:

> "Current indicators, such as GDP, do not reflect the growing importance of new social values such as well-being and sustainability and are unable to monitor and raise awareness on innovation to address social challenges. New indicators are needed to account for social values" (OECD, 2011: 9)

This is clearly the case, for example, with respect to the Community Innovation Survey, which has only recently developed new indicators to capture the non-technological aspects of innovation (CEC, 2013b). In addition, little has been done to measure the "soft skills" that drive innovation, such as cooperation[40].

Recent studies are starting to address some of these problems. For example, several reports on Social Return on Investment (SORI) have been published. Fujiwara (2013) suggests that defining social purpose and evidencing its impact is becoming increasingly important. This includes assessing the extent to which social need is being met; ensuring value for money; and if an organisation's own mission is being met (Fujiwara, 2013: 5). The metrics issue is set to loom larger and larger because researchers in the TEPSIE project have explored the scope and limits of social innovation metrics (Bund, et al, 2013), while the Basque Region has now produced a regional index to measure social innovation (RESINDEX, 2013).

5.7 Policy Capacity Challenge

> "Addressing social challenges through innovation requires the integration of competencies that are still to a large degree disconnected, especially technological and non-technological competencies, as well as the natural and social sciences (OECD, 2011: 9-10)

The S3 policy agenda is a profoundly ambitious agenda and it will make exacting demands on the policy-making process at all levels of the EU's multi-level polity, especially at the level of the regional state (Morgan, 2013). If collaborative innovation is to be a success, significant changes will be needed, including new skill sets and a new

[40] Bruno Lavin of Insead cited in Cookson (2013)

social dialogue, which may entail a redistribution of power among organizations and social groups (BEPA, 2011). And where social innovation is part of the project, these changes will also require "greater involvement of stakeholders who can introduce the necessary capabilities and interests in research and innovation to address social challenges (OECD, 2011: 10). The creation of new networks and communities of practice is a social learning process involving the construction of shared meanings, norms, values and understandings (Wenger, 1998; Bruno et al, 2008: 6). Social learning can be stymied by risk averse organisational cultures, weak feedback mechanisms and conventions that extol process over outcomes, all of which are particularly acute problems in the public sector. Taken together, these problems corrode the capacity for regional experimentation (Morgan and Henderson, 2002).

6 CONCLUSIONS

Smart specialization and social innovation are two of the most rapidly growing themes in the innovation policy studies literature and one of the key questions to have emerged from our review concerns the extent to which the latter can be assimilated by and contribute to the former. The way we answer this question tells us much about the way we conceive and understand "social innovation": that is to say, whether we frame it in a narrow sense, as a mere extension to the conventional STI paradigm, or in a more capacious sense, as signifying something larger and more societal than a science and technology narrative. Our answer to this key question is summarised below in Section 6.1. For the sake of convenience and clarity, this concluding section is structured to reflect the four core themes of WP2.

6.1 Conceptual linkages between S3 and SI

Although we concurred with the view that S3 and SI are both context-dependent, quasi-concepts, there is one major difference between them: S3 has a well developed intellectual lineage in the innovation policy studies field, being the latest phase of two decades of RIS policy and practice, whereas SI has no such lineage in this field, being a genuine outsider. This may help to explain why there are so many perceived conceptual differences between the two concepts, as we showed in a stylized fashion in Table 2.1. While some of these differences are blurring in practice, there remains a large conceptual divide between S3 and SI when the latter is approached through a societal rather than a technological lens. As we noted above, however, the scope for conceptual linkage depends in no small way on whether we frame social innovation narrowly or broadly (i.e. whether it is primarily about complementarity or alterity). If social innovation is seen as a complement to the conventional STI paradigm, then it can be conceptually assimilated into this paradigm under the auspices of the Quadruple Helix, the main aim of which is to introduce civil society actors into the innovation equation (see Arnkil et al, 2010).

On the other hand, if social innovation is primarily conceived in terms of alterity, then it becomes a vehicle for the creation of alternative and diverse economic spaces and transformative societal relationships along the lines envisaged by socio-ecological critics like Fuller et al (2010) and Gibson-Graham (1996; 2008), who set a high premium on the role of what we might call the mundane economy. The concept of the mundane economy embraces sectors that loom large in meeting core human needs - such as health, education, food, water, housing, energy, social care and the like - sectors which need to be present in all regions on the grounds of social justice and ecological integrity. This socio-ecological critique challenges the conceptual core of the S3 concept - which is that regions need to differentiate themselves, through specialisation in sectors where they have a comparative advantage, if they wish to reap economies of scale and scope. Contrary to Foray (2013), the alterity school of social innovation would argue that mundane sectors need to be universally present in all regions (Morgan, 2013).

Although the mundane sectors used to be classified as part of the "non-tradeable" part of the economy, this classification is no longer tenable because, as a consequence of privatisation and deregulation, each and every one of these sectors contains some tradeable activity - health and education, for example, are now burgeoning parts of the knowledge economy in most OECD countries. In other words, it is possible for the mundane economy to be universally represented in every region, so as to meet an array of social and ecological needs, *and* for each region to develop some aspect of these sectors in a more specialised and commercial direction depending on their comparative strengths and interests, thereby

securing a regional amalgam of social *universality* and economic *specialisation*. It is through the prism of such regional amalgams, we would argue, that it becomes possible to bridge the conceptual divide that causes S3 and SI to be treated as binary opposites in some sections of the theoretical literature.

From the SI side the notion of the regional amalgam reinforces the arguments of BEPA (2011) and Pol and Ville (2009) regarding the need to 'blend' economic and social spheres rather than juxtaposing them as separate policy domains. From the RIS side, S3 seeks to enrol a broader range of stakeholders, including citizens in the regional innovation design process. We sought to visualise this inclusive perspective in the schema in Figure 3.1, which illustrated the scope for new *possibility spaces* to be created in which S3 and SI strategies could be integrated, generating new forms of collaborative innovation that could address social as well as economic ends.

6.2 Public services innovation

Public services innovation involves nothing less than new imaginaries of the state and we argued that social innovation has a large role to play in this process of re-imagination. We interpreted "public services" in a dual sense to include (i) the *developmental* role of the state, which involves its capacity to promote innovation and development through an array of business support services and (ii) the *welfare* role of the state, which involves the design and delivery of public social services like health, education and social care for example.

With respect to the developmental role we found some merit in the "entrepreneurial state" thesis propounded by Mazzucato (2013) because it helps to change the way we talk about the state: challenging the neo-liberal narrative, in which the state is cast as an irredeemably inefficient institution, she argues that the state can play a positive role in funding new technologies and fashioning new markets, especially when it deploys its power of purchase in a bold and purposive manner. To illustrate her argument, Mazzucato draws on the pioneering experience of DARPA, the US defence agency, to prove that public sector procurement policy really can foster technological innovation and economic development when it is deployed boldly. Social innovation *within* the state helps to explain why DARPA has been such a stellar public sector agency because it was encouraged to be risk aware rather than risk averse when it designed its tenders and it was allowed to recruit highly specialised managers to manage its relationships with private sector suppliers. In short, it was largely exempt from the prosaic protocols that stymie novelty and innovation in vast swaths of the public sector in virtually every country in the world (Morgan, 2013).

This is not argument against DARPA, but a plea for more socially innovative practices to be allowed to flourish in the public sector, in the absence of which public bodies will be unable to deploy their powers of purchase in bold and creative ways to promote innovation and development.

These arguments apply equally if not more to the welfare role of the state, where the traditional model of public social services has reached a crisis point because of the combined effects of fiscal austerity, demographic change and a bureaucratic public sector culture that extols processes over outcomes, hierarchies over networks. We argued that new imaginaries are also needed in this domain if the welfare state is to be sustained and social innovation is one of the ingredients in the recipe for a more sustainable system of public services because it offers a new model – namely co-creation – in which service providers and service users are equally involved in finding joint solutions to common problems. But we agreed with researchers who argued that the "co-creation approach calls for new and riskier ways of

working, effectively giving away power with a goal to achieving better solutions" (Hambleton and Howard, 2012:33). We also concur with their argument that this requires public sector leadership of a non-traditional kind involving: creating new spaces for people from different backgrounds to come together and learn from each other; getting the right people into the spaces they have created; modelling and disseminating ways of working that encourage openness and assist others to overcome their fear of change or failure.

With respect to both domains of public services – the developmental state and the welfare state – we argued that the state needs to become more supportive of experimentation and less risk averse. Public sector innovation is not possible in a context where employees fear for their lot and where their energies are consumed by the dull compulsion of everyday life. Creativity requires mental freedom, which is what Schumpeter meant when he called for more freedom from the "work and care of the daily round". Pioneering private sector firms like Google and Dyson demonstrate an enlightened sense of self-interest when they give talented employees what they crave above all – namely time to indulge their own interests – a form of social innovation that is urgently needed in the public sector.

6.3 Civil society, users and citizens

The involvement of civil society, users and citizens (civic stakeholders for short) is belatedly being recognised as an important source of social innovation, especially in the public social services, where it is a key component of the co-creation model on which the future of the welfare state is predicated. Far from being confined to public social services, the role of civic stakeholders is also being recognised as an important source of new forms of collaborative innovation within the dominant STI paradigm (CEC, 2013e). In other words, the involvement of civic stakeholders is deemed to be important not merely to the meeting of social needs on the SI side, but also to the promotion of economic development on the S3 side, the regional amalgam that we discussed earlier.

We sought to visualise the dual role of civic stakeholders in Figure 4.3, where we outlined a picture of the "elderly cluster", which consists of 8 thematic categories of potential socio-economic innovation (eg wellness, housing, food etc), supported by a set of common catalysts (eg ICT and public procurement). Although this applies specifically to the elder care sector, it neatly illustrates the potential for what we call *possibility spaces* in which regions can combine universality of social provision to meet social needs in every region with the uneven scope for economic specialisation, and the latter will depend on the region's competence and interests. The involvement of civic stakeholders will be important to both sides of the regional amalgam – the universal/social as well as the specialised/economic – because, as 'lead-users', they bring commitment and knowledge to the framing of problems and the identification of solutions. This argument has been admirably captured in the work of Eric von Hippel and we wholly concur with his findings on the democratisation of innovation (especially von Hippel, 2005).

However, we highlighted two major dangers with the involvement of civic stakeholders - the problems of participation and power. First, great care needs to be taken to ensure that participation is genuinely inclusive, otherwise the "usual suspects" will dominate the process whilst claiming to speak on behalf of the "community", a perennial problem in community studies. Second, we should not be naive enough to think that the "usual suspects" that constitute the networks of the Tripe Helix will fling open the doors to the newcomers from civil society. To put it bluntly, and perhaps crudely, the dominant STI actors are unlikely to morph into the harbingers of the Quadruple Helix. Power relations will need to be addressed

if the insiders of the Triple Helix are not to exercise a veto over the involvement of civic stakeholders.

6.4 Social Enterprise

Social innovation is often (wrongly) equated with and reduced to the social enterprise sector, when the latter is merely one of the vehicles for the former. Our core argument here basically consisted of two warnings to policy-makers and practitioners alike: (i) that the social enterprise sector was too heterogeneous to justify generalisations about its contribution to either S3 or SI and (ii) that the shortcomings of the sector would become more visible as it sought to accentuate the "enterprise" side of its vocation.

As regards the first point, we illustrated the heterogeneity of the sector in Table 3.1, which drew on the BEPA survey of social innovation in the EU. The mix of operating criteria shown in Table 3.1 is likely to become even more blurred or blended in the coming years as the sector evolves under the twin pressures of societal change and fiscal austerity. We argued that this will probably tend to increase the degree of heterogeneity in the sector because the more competent social enterprises will be tempted to become more formal agents of the state in the sense that they will bid for public service contracts, or become sub-contractors within larger bidding consortia, to deliver the welfare services that are being outsourced by a fiscally constrained public sector.

This outsourcing trend is being driven by two distinct forces: in northern European countries like the UK, it is being driven by an ideological offensive to shrink the state, while in southern European like Greece, it is being driven by fiscal necessity. Either way, the social enterprise sector will be faced with a new combination of opportunities (for economic growth) and threats (like becoming commissioned agents of the state and diluting their social mandate).

Our second point concerned the shortcomings of the sector. As it strives to become more entrepreneurial, a fate that is being forced on it due to the twin pressures noted above, the sector's systemic constraints will become more and more apparent. Drawing on the UK experience, we identified three major constraints on the social enterprise sector, namely leadership constraints, management constraints and funding constraints (Morgan and Price, 2011). None of these constraints is necessarily fatal so long as they are properly recognised and promptly addressed. But such corrective action has been conspicuous by its absence in the UK to date.

These systemic constraints on the social enterprise sector are not confined to the UK and therefore they need to be addressed at all levels of the multi-level polity in the EU because, taken together, they have the potential to foster or frustrate the growth of social innovation in all its forms. We emphasise *all its forms* because the core argument of this reflections paper is that social innovation is too amorphous and heterogenous a concept, straddling too many sectors and activities, for it to be simply assimilated into the dominant STI paradigm without qualification. To this end we have sought to explain how, through the creation of possibility spaces, SI can be rendered compatible with the S3 policy agenda.

References

Arnkil, R., Järvensivu, A., Koski, P. and Piirainen, T (2010) " Exploring Quadruple Helix: Outlining user-oriented innovation models. Final Report on Quadruple Helix". Research for the CLIQ project." Työraportteja 85/2010 Working Papers http://tampub.uta.fi/bitstream/handle/10024/65758/978-951-44-8209-0.pdf?sequence=1

Almirall and Wareham, (2011) Living Labs: arbiters of mid and ground level innovation *Technology Analysis & Strategic Management*, 23:1, 1-6

Bason, C (2010) *Leading Public Sector Innovation: Co-creation for a better society*. Bristol: Policy Press

Benneworth, P. and Jongbloed. P.W. (2009) 'Who matters to universities? A stakeholder perspective' High Education (2010) 59:567–588. DOI 10.1007/s10734-009-9265-2. Available at: http://download.springer.com/static/pdf/892/art%253A10.1007%252Fs10734-009-9265-2.pdf?auth66=1386674945_c1a7b477f41e2ce0a6b68b2c6fff6400&ext=.pdf

BEPA (2011) "Empowering people, driving change: Social Innovation in the European Union" Report prepared by the Bureau of European Policy Advisers for the European Commission. Luxembourg: CEC. Available from: http://ec.europa.eu/bepa/pdf/publications_pdf/social_innovation.pdf accessed 14.11.11 from

Blaschke, C.M, Freddolino, P.P. and Mullen, E.E. (2009) Ageing and Technology: A Review of the Research Literature, *British Journal of Social Work* (2009) 39, 641–656, doi:10.1093/bjsw/bcp025

Boekholt, P. (2013) Aligning Policy Agendas: The Case of Personalised Care and Cure for Healthy and Active Ageing. Paper presented at the Regions as Motors of Growth through Smart Specialisation Conference, Brussels, 8.11.13

Bund, E. Hubrich, D-K; Schmitz, B., Mildenberger, G. and Gorgi, K. (2013): Blueprint of social innovation metrics – contributions to an understanding of opportunities and challenges of social innovation measurement. A deliverable of the project: "The theoretical, empirical and policy foundations for building social innovation in Europe" (TEPSIE), European Commission – 7th Framework Programme, Brussels: European Commission, DG Research. Available at: http://www.tepsie.eu/index.php/publications. Last accessed 16.12.13

Bruno, N., Miedzinski, M. Reid, A. and Yanz, M.R. (2008) "Socio-cultural determinants of Eco Innovation". Report prepared as part of the SYSTEMTIC Project. Technopolis: Europa Innova. Available at: http://www.nano-oresund.org/gnnc/main-filer/pdf/Socio_Cultural_factor_EcoInnovation.pdf . Last accessed 18.12.13

Brynjolfsson, E. and Saunders, A. (2010) *Wired for Innovation: How Information Technology is Reshaping the Economy*. Cambridge, Mass: MIT

Calzada, I. (2013) "Knowledge building and organizational behavior: the Mondragon case from a social innovation perspective" In Moulaert, F., MacCallum, D., Mehmood, A. and A. Hamdouch (eds) (2013) *The International Handbook on Social Innovation: Collective Action, Socail Learning and Transdisciplinary Research*. Cheltenham: Edward Elgar

Castells, M. (2001) *The Internet Galaxy*. Oxford: Oxford University Press

CEC (n.d) Fact Sheet: Regional Innovation Strategies for Smart Specialisation. RIS3 Draft Guide produced by European Commission Directorate-General Regional Policy (Policy Coordination)

CEC (n.d) "European Innovation Partnership on Active and Healthy Ageing: Excellent innovation for ageing A European Guide" http://ec.europa.eu/research/innovation-union/pdf/active-healthy-ageing/rs_catalogue.pdf Last accessed 12.11.13

CEC (2010a) "Regional Policy contributing to smart growth in Europe 2020" (CEC, COM(2010) 553 final). Communication from the Commission to the European Parliament, The Council, The European Economic and Social Committee and Committee of the Regions, SEC (2010) 1183.

CEC (2010b) Europe 2020 Flagship Initiative Innovation Union SEC(2010) 1161Brussels, 6.10.2010 COM(2010) 546 final http://ec.europa.eu/research/innovation-union/pdf/innovation-union-communication_en.pdf Last accessed 20.11.13

CEC (2012a) Effective online public services for citizens and businesses. Innovative online public services in an inclusive and reflective society. http://www.epsos.eu/fileadmin/content/images/press_section/ICTforSocietalChallenges.pdf

(CEC, 2012b) 'ICT for Societal Challenges' A report by DG Connect. Available at: http://www.epsos.eu/fileadmin/content/images/press_section/ICTforSocietalChallenges.pdf Last accessed 18.12.13

CEC (2012c) Strengthening social innovation in Europe: Journey to effective assessment and metrics. DG Enterprise and Industry. Available at: http://ec.europa.eu/enterprise/policies/innovation/files/social-innovation/strengthening-social-innovation_en.pdf Last accessed 18.12.13

CEC (2012d) "The 2012 Ageing Report: Economic and budgetary projections for the EU27 Member States (2010-2060). Joint Report prepared by the European Commission (DG ECFIN) and the Economic Policy Committee (AWG)". Available at: http://ec.europa.eu/economy_finance/publications/european_economy/2012/2012-ageing-report_en.htm . Last accessed 18.12.13

CEC (2013a) "Guide to Social Innovation. DG Urban and Regional Policy". Available at: http://ec.europa.eu/regional_policy/sources/docgener/presenta/social_innovation/social_innovation_2013.pdf Last accessed 18.12.13

CEC (2013b) "Innovation Union Scoreboard 2013 Annex A: Definitions of indicators" http://ec.europa.eu/enterprise/policies/innovation/files/ius-2013_en.pdf Last accessed 20.11.13

CEC (2013c) "Fact Sheet Research and innovation strategies for smart specialisation: COHESION POLICY 2014-2020)" Available at; http://ec.europa.eu/regional_policy/sources/docgener/informat/2014/smart_specialisation_en.pdf Last accessed 18.12.13

(CEC, 2013d) "Europeans' Engagement in Participatory Democracy". Available at: http://ec.europa.eu/public_opinion/flash/fl_373_en.pdf Last accessed, 20.11.13

CEC (2013e) "Green Paper on Citizens' Science: Citizen Science for Europe: Towards a better society of empowered citizens and enhanced research" Available at: http://www.socientize.eu/sites/default/files/Green%20Paper%20on%20Citizen%20Science%202013.pdf Last accessed 15.12.13

CEC (2013g) Social innovation research in the European Union Approaches, findings and future directions policy review

Chadwick, A. and Howard, P.N. (2009) "New directions in internet politics research", in Chadwick, A. and Howard, P.N. 2009 (eds) *The Routledge Handbook of Internet Politics*. Abingdon, Oxon: Routledge

Charles, D., Gross, F. and Batchler, J. (2012) "Smart Specialisation and Cohesion Policy – A strategy for all regions?" IQ-Net Thematic Paper 30(2). Available at: http://www.eprc.strath.ac.uk/iqnet/downloads/IQ-Net_Reports(Public)/ThematicPaper30(2)Final.pdf Last accessed 17.10.13

Chesbrough, H.W. (2003) *Open Innovation The New Imperative for Creating and Profiting from Technology*, Boston, Mass: Harvard University Press

Chew, C. and Lyon, F. (2012) "Innovation and social enterprise activity in third sector organisations." Third Sector Research Centre, Working Paper 83. Available at: http://www.birmingham.ac.uk/generic/tsrc/documents/tsrc/working-papers/working-paper-83.pdf Last accessed 23.12.13

Clark, J; Good, B; Simmonds, P (2008) "Mini-project 4: Innovation in the public and third sectors". Technopolis Group. A report commissioned by NESTA, 12 September 2008

Cooke, P. and Morgan, K. (2000) *The Associational Economy*, Oxford: OUP

Cookson, C. (2013c) 'Gap between the best and the rest is increasing': Innovation and the Economy: FT Special Report, Financial Time. Available at :http://www.ft.com/cms/s/0/5a239004-2a98-11e3-8fb8-00144feab7de.html#axzz2nYntgOv8. Last accessed 15.12.13

Davies, A, and Simon, J, (2013) 'The value and role of citizen engagement in social innovation'. A deliverable of the project: "The theoretical, empirical and policy foundations for building social innovation in Europe" (TEPSIE), European Commission – 7th Framework Programme, Brussels: European Commission, DG Research. Available at: http://www.tepsie.eu/index.php/publications Last accessed 15.12.13

Davies, A, Simon, J, Patrick, R and Norman, W. (2012) 'Mapping citizen engagement in the process of social innovation'. A deliverable of the project: "The theoretical, empirical and policy foundations for building social innovation in Europe" (TEPSIE), European Commission – 7th Framework Programme, Brussels: European Commission, DG Research. Available at: http://www.tepsie.eu/index.php/publications Last accessed 15.12.13

De Jong, J.P.J, Kalvet, T. and W. Vanhaverbeke (2010) "Exploring a theoretical framework to structure public policy implications of open innovation", *Technology Analysis and Strategic Management*, 22:8, 877-896. DOI:10.1080/09537325.2010.522771

Dunleavy, P., Margetts, H., Bastow, S. and Tinkle, J. (2006). Digital era governance: IT corporations, the State and e-government. Oxford, UK: Oxford University Press.

Drucker, P. (1987) 'Social innovation: management's new dimension', *Long Range Planning*, 20, 6, 29-34.

Etzkowitz, H. and Leydesdorff, L. (2005) Universities and the Global Knowledge Economy: A triple-helix of university-industry-government relations. Continuum Studies in Higher Education

EURADA (2011) Directory of "No-Nonsense" Activities To Build S³-minded Regions. Scoping Document for Agorada 2011+. EURADA-NEWS Nr 339 – 8.12.11. European Association of Development Agencies Association Européenne des Agences de Dévelopement. Available at: http://www.eurada.org/index.php?option=com_content&view=article&id=184&Itemid=202&lang=en Last accessed 1812.13

Eurobarometer (2012) *Active Ageing* (2012). Special Eurobarometer 378. Conducted by TNS Opinion & Social at the request of Directorate-General for Employment, Social Affairs and Inclusion. Available at: http://ec.europa.eu/public_opinion/archives/ebs/ebs_378_en.pdf Last accessed 18.12.13

Eurofoundation for the Improvement of Living and Working Conditions (2013) Social Innovation in Service Delivery: New Partners and Approaches. Available at: http://www.eurofound.europa.eu/pubdocs/2013/54/en/1/EF1354EN.pdf. Last accessed 26.12.13

Financial Times (2013) Global spending on drugs to exceed $1tr, Andrew Jack, Financial Times, 19.11.13, http://www.ft.com/cms/s/0/7b94b628-5068-11e3-befe-00144feabdc0.html?siteedition=uk#axzz2l5Q1Jd4D. Last accessed 19.11.13

Foray, D., Goddard, J., Beldarrain, X.G., Landabaso, M., McCann, P., Morgan, K., Nauwelaers, C., Ortega-Argilés, R. and F. Mulatero (2012) Guide to Research and Innovation Strategies for Smart Specialization (RIS3). Prepared for European CommissionDG Regional Policy. Available at: http://s3platform.jrc.ec.europa.eu/en/c/document_library/get_file?uuid=e50397e3-f2b1-4086-8608-7b86e69e8553 Last accessed 18.12.13

Foray, D. (2013) "The economic fundamentals of smart specialisation". EKONOMIAZ, 83, 2, cuatrimestre, 2013

Friedman, T.L. (2007 *The World is Flat (Release 3.0).* New York: Picador

Frissen V A J, 2008, "The e-emancipation of the citizen and the future of e-government: reflections on ICT and citizens' participation", in Electronic Government: Concepts, Methodologies, Tools and Applications. Ed. A Anttiroikko, Information Science Reference, New York, NY.

Fujiwara, D (2013) "The Social Impact of Housing Providers". Report produced for Housing, People and Communities (HACT). Available at: www.hact.org.uk Last accessed 01.03.2013

Fuller, D. et al (2010) *Interrogating Alterity: Alternative Economic and Political Spaces*, Farnham, Ashgate,

Galbraith, B. and McAdam, R. (2011) "The promise and problem with open innovation", *Technology Analysis & Strategic Management*, 23:1, 1-6, DOI: 10.1080/09537325.537084

Gatehouse, M. and Price, A. (2013) State of Innovation: Welsh Public Services and the Challenge of Change, NESTA

Gann, D. and Dodgson M. (2007) "Innovation Technology: How new technologies are changing the way we innovate". NESTA Provocation 05, September 2007. Available at www.nesta.org.uk Last accessed 4.12.13

Gibson-Graham, J.K. (1996) *The End of Capitalism (as we knew it): A Feminist Critique of Political Economy*, Minneaplois, University of Minnesota Press

Gibson-Graham, J.K. (2008) Diverse Economies: Performative Practices for 'Other' Worlds, *Progress in Human Geography*, 32:5, 613-632

Giddens, A. (1998) *The Third Way*. The Renewal of Social Democracy, Cambridge, UK: Polity Press.

GOSS Interactive. (2013). Public sector digital engagement and social media. Plymouth, UK: GOSS. Retrieved from: http://www.gossinteractive.com.

Haddock , S.V. (2013) "Introduction: the pillars of social innovation research and practice", in In Moulaert, F., MacCallum, D., Mehmood, A. and A. Hamdouch (eds) (2013) *The International Handbook on Social Innovation: Collective Action, Socail Learning and Transdisciplinary Research*. Cheltenham: Edward Elgar.

Hämäläinen, T. and and Heiskala, R. (eds) (2007) *Social Innovations, institutional change and economic performance,* Cheltenham: Edward Elgar Publishing

Hambleton, R. and Howard, J (2012) Public Sector Innovation and Local Leadership in the UK and the Netherlands, York: Joseph Rowntree Foundation. Also available at www.http//jrf.org.uk

Harris, M. and Albury, D (2009). "Why radical innovation is needed for the recession and beyond: The Innovation Imperative". NESTA discussion paper, March.
Available at www.http//nesta.org.uk/ Last accessed 12.11.12

Hutton, W. and Schneider, P. (2008) The failure of market failure Towards a 21st century Keynesianism, London: NESTA. Available at:
http://testing.nesta.org.uk/publications/provocations/assets/features/the_failure_of_market_failure_towards_a_21st_century_keynesianism Last accessed 18.12.13

KMU Forschung (2007) 'Study on Practices and Policies in the Social Enterprise Sector in Europe". Final Report to European Commission, DG Enterprise and Industry. Available at: http://ec.europa.eu/enterprise/newsroom/cf/_getdocument.cfm?doc_id=3408 Last accessed 15.11.13

Jessop, B., Moulaert, F., Hulgård and A. Hamdouch (2013) 'Social innovation research: a new stage in innovation analysis? In Moulaert, F., MacCallum, D., Mehmood, A. and A. Hamdouch (eds) (2013) *The International Handbook on Social Innovation: Collective Action, Socail Learning and Transdisciplinary Research*. Cheltenham: Edward Elgar

Jenkins, H. (2007) *Convergence Culture*, New York: New York University Press

Johnson, M (2013) Mondragon co-op reels after loss of oldest member, Financial Times, 10 December

Klein, J-L. (2013) 'Introduction: social innovation at the crossroads between science, economy and society', in Moulaert, F., MacCallum, D., Mehmood, A. and A. Hamdouch (eds) (2013) *The International Handbook on Social Innovation: Collective Action, Socail Learning and Transdisciplinary Research*. Cheltenham: Edward Elgar

Kunnen, N., MacCallum, D. and Young, S. (2013) 'Research strategies for assets and strengths based community development', in Moulaert, F., MacCallum, D., Mehmood, A. and Hamdouch, A. (eds) (2013) *The International Handbook on Social Innovation: Collective Action, Socail Learning and Transdisciplinary Research*. Cheltenham: Edward Elgar

Leadbeater, C. (2009) *We Think*. London: Profile Books

Leitner, K-H., Rhomberg, W., Warnke, P., and Kasztler, A. "Innovation Futures in Europe (INFU): A Foresight Exercise on Emerging Patterns of Innovation, Visions, Scenarios and implications for Policy and Practice. Policy Strategy Report. Available at: http://www.innovation-futures.org/sites/default/files/INFU%20Final%20Report%20March%202012_0.pdf

Lévesque, B. (2013) Social innovation in governance and public management systems: toward a new paradigm? In Moulaert, F., MacCallum, D., Mehmood, A. and Hamdouch, A. (eds) (2013) *The International Handbook on Social Innovation: Collective Action, Socail Learning and Transdisciplinary Research*. Cheltenham: Edward Elgar.

Lister, R. (2003b) "Investing in the citizen-workers of the future: transformations in citizenship and the state under New Labour", *Social Policy and Administration,* 37 (5): 427-443.

Lundström, A and Zhou, C. (2011) "Promoting innovation based on social sciences and technologies: the prospect of a social innovation park", *Innovation: the European Journal of Social Science Research,* 24:1-2, 133-149, DOI: 10.1010/13511610.2011.583864

Marques, P. (2011) 'Theories and Policies of Innovation: A Critical Review' *Geography Compass* 5,11: 838–850, 10.1111/j.1749-8198.2011.00457.x

Marsh, S. (2013) 'Councils still focus on lowest price, rather than social value, MPs told' Guardian 26.11.2013. Available at: http://www.theguardian.com/local-government-network/2013/nov/26/mps-council-procurement-social-value. Last accessed 27.11.13

Mazzucato, M. (2013) *The Entrepreneurial State: Debunking Public vs. Private Sector Myths*. London: Anthem Press

Millard, J., Nielsen, N.C., Thaarup, R.K.(2013). "Report on the role of communities and networks in social innovation, and the role that online networking tools are playing", a deliverable of the project: "The theoretical, empirical and policy foundations for building social innovation in Europe" (TEPSIE), European Commission – 7th Framework Programme. Available at: http://www.tepsie.eu/index.php/publications Last accessed 15.12.13

Mitchell, W.J., Inouye and Blumenthal, M.S. (eds) (2003) *Beyond Productivity: Information Technology, Innovation and Creativity*. Report to the National Research Council. Washington D.C: The National Academies Press

Morgan, K. (2013a) The Regional State in the Era of Smart Specialization, *Economiaz*, No. 83

Morgan, K. (2013b) Nurturing Novelty: The Evolutionary World of Regional Innovation Policy, Keynote Speech to the *Eighth International Seminar on Regional Innovation Policy*, San Sebastian, 10-11 October

Morgan, K. and Henderson, D. (2002) Regions as Laboratories: The Rise of Regional Experimentalism in Europe, in M. Gertler and D. Wolfe (eds) *Innovation and Social Learning,* Basingstoke, Macmillan.

Morgan, K. And Sonnino, R. (2008) *The School Food Revolution: Public Food and the Challenge of Sustainable Development*, London, Earthscan

Morgan, K. and Price, A. (2011) *The Collective Entrepreneur: Social Enterprise and the Smart State*, Charity Bank, Cardiff

Moulaert, F. and Sekia, F. (2003) "Territorial Innovation Models: A critical survey" *Regional Studies*, 37, 289-302,

Moulaert, F. and Ailenei, O. (2005) "Social Economy, Third Sector and Solidarity Relations: A Conceptual Synthesis from History to Present." *Urban Studies* 2005 42: 2037

Moulaert, F., Martinelli, F., González, S. and Swyngedouw, E (2007) "Introduction: Social Innovation and Governance in European Cities Urban Development Between Path Dependency and Radical Innovation" *European Urban and Regional Studies* 14(3): 195–209

Moulaert, F., MacCallum, D., Mehmood, A. and Hamdouch, A. (eds) (2013a) *The International Handbook on Social Innovation: Collective Action, Socail Learning and Transdisciplinary Research*. Cheltenham: Edward Elgar.

Moulaert, F, McCallum, D. and J. Hillier (2013b) 'Social innovation: intuition, precept, theory and practice, in Moulaert, F., MacCallum, D., Mehmood, A. and Hamdouch, A. (eds) (2013a) *The International Handbook on Social Innovation: Collective Action, Socail Learning and Transdisciplinary Research*. Cheltenham: Edward Elgar.

Mulgan, G. (2013) *The Locust and the Bee: Predators and Creators in Capitalism's Future*. New Jersey: Princeton University Press.

Murray, R., Caulier-Grice, J. and Mulgan, G. (2010) The Open Book of Social Innovation. London: NESTA. Available at http://www.nesta.org.uk/publications/open-book-social-innovation. Last accessed 1.11.13

Nauwelaers, C. (2013) "Underpinning S3 effective strategy design". Reflection Paper WP4 *SmartSpec*. Draft Version 2 (20 December 2013)

NESTA (2007a) "Innovation in response to social challenges", Policy Briefing, SC/03, March 2007: 1). Available at: Last accessed 3.11.13

NESTA (2007b) "Making Innovative Places". Policy Briefing, MIP/17, December 2007. Available at: http://www.nesta.org.uk/sites/default/files/making_innovative_places.pdf Last accessed 3.11.13

NESTA (2007c) "Connect, collaborate, innovate": Policy Briefing CCI/109). Available at: http://www.nesta.org.uk/sites/default/files/connect_collaborate_innovate.pdf Last accessed 3.11.13

NESTA (2008): Social Innovation: New approaches to transforming public services: 1 - SI/18 / Published: January 2008 - Social Innovation: New approaches to transforming public services http://www.nesta.org.uk/sites/default/files/social_innovation_policy_brief_cover.pdf

Noya A. (ed.) (2009) *The Changing Boundaries of Social Enterprises*. Paris: OECD

Novy, A., Habersack, S. and Schaller, B. (2013) "Innovative forms of knowledge production: transdisciplinarity and knowledge alliances", in Moulaert, F., MacCallum, D., Mehmood, A. and Hamdouch, A. (eds) (2013) *The International Handbook on Social Innovation: Collective Action, Socail Learning and Transdisciplinary Research*. Cheltenham: Edward Elgar.

OECD (2007) "Participative Web and User Created Content: Web 2.0, Wikis and Social Networking". Paris: OECD. Available for download at: http://www.oecd.org/fr/sti/ieconomie/participativewebanduser-createdcontentweb20wikisandsocialnetworking.htm

OECD (2008b) 'Shaping Policies for the Future of the internet economy'. Prepared for the OECD Ministerial Meeting on the Future of the Internet Economy, Seoul, Korea, 17-18 June 2008.

OECD (2010) SMEs, Entrepreneurship and Innovation. Paris: OECD

OECD (2011) "Fostering Innovation to Address Social Challenges", Workshop Proceedings, http://www.oecd.org/sti/inno/47861327.pdf

Oeij, P.R.A., Dhondt, S., Korver, Ton. (2011) Workplace Innovation, Social Innovation, and Social Quality *International Journal of Social Quality*, 1, 2, 31-49(19)

Oosterlynck, S. (2013) 'Introduction: social innovation – an idea longing for a theory' in Moulaert, F., MacCallum, D., Mehmood, A. and Hamdouch, A. (eds) (2013a) *The International Handbook on Social Innovation: Collective Action, Socail Learning and Transdisciplinary Research*. Cheltenham: Edward Elgar.

Prahalad, C.K and Ramaswamy, V. (2004) 'Co-creation experiences : the next practice in value creation'. Available at: http://deepblue.lib.umich.edu/bitstream/handle/2027.42/35225/20015_ftp.pdf Last accessed 14.12.13

Pol, E. and Ville, S. (2009) Social Innovation: Buzz word or enduring term? *The Journal of Socio-Economics*, 38, 6, 878-885

Qualman, E. (2012) *Socialnomics: how social media changes the way we live and do business*, Hoboken, NJ: John Wiley and Sons

RESINDEX (2013) "A regional index to measure social innovation". Bizkaia, Spain: Innobasque, Basque Innovation Agency

Rowlingson, K (2012) Wealth inequality: key facts. Policy Commission on the Distribution of Wealth, Birmingham University www.birmingham.ac.uk/.../Key-Facts-Background-Paper-BPCIV.pdf

Rubalcaba L., Windrum P., Gallouj F., Di Meglio, G., Pyka, A., Sundbo J., and Webber, M. (n.d) 'The Contribution of Public and Private Services to European Growth and Welfare, and the Role of Public-Private Innovation Networks'. Servppin Final Publishable Summary Report. Available at: http://siresearch.eu/public-innovation/project/servppin Last accessed 4.12.13

Sabel, C (2006) A Real-Time Revolution in Routines, in C. Heckscher and P. Adler (eds) *The Firm as a Collaborative Community*. Oxford: OUP

Sainsbury, D. (2013) *Progressive Capitalism*, London: Biteback Publishing

Schumpeter, J. (1934) *The Theory of Economic Development*, Cambridge, MA: Harvard University Press

Skapinker, M. (2013) "One and a half cheers for Ralph Miliband, the smart Marxist." Financial Times, 9.10.13. Available at: http://www.ft.com/cms/s/0/61c36852-2f6b-11e3-8b7e-00144feab7de.html?siteedition=uk#axzz2hCsE2vtC Last accessed 10.10.13

Social Innovation eXchange (SIX) and Young Foundation (2010) 'Study on Social Innovation'. A paper prepared for the Bureau of European Policy Advisors. Available at: http://youngfoundation.org/wp-content/uploads/2012/10/Study-on-Social-Innovation-for-the-Bureau-of-European-Policy-Advisors-March-2010.pdf Last accessed 4.12.13

Social Enterprise UK (2012) "Public Services (Social Value Act) 2012. A brief guide." Available at: http://www.socialenterprise.org.uk/news/new-guide-the-public-services-social-value-act Last accessed 28.11.13

Social Innovation Europe (nd) "Social Innovation in Europe January 2011 – December 2012: Enabling a European environment that can find support and share what works". Available at: http://ec.europa.eu/enterprise/policies/innovation/files/social-innovation/sie-final-report_en.pdf Last accessed 18.12.13

Stumbitz, B, McDowall, R. and Gabriel, M. (2012) "Golden Opportunities: Social Entrepreneurs in an Ageing Society Research Unlimited". Available at: http://unltd.org.uk/ . Last accessed 18.12.13

Sutcliffe, H. (nd) A report on Responsible Research and Innovation Available at: http://ec.europa.eu/research/science-society/document_library/pdf_06/rri-report-hilary-sutcliffe_en.pdf Last accessed 18.12.13

Tapscott and Williams (2008) Wikinomics: How mass collaboration changes everything, (2nd edition) London: Atlantic Books

Toffler, A. (1980) The Third Wave, New York, NY: Bantam

Treanor, J. and Farrell, S (2013) 'Co-op Group loses majority control of banking division'. Guardian, 21.10.13. http://www.theguardian.com/business/2013/oct/21/coop-group-bank-us-hedge-funds Last accessed 23.12.13

UNFPA (2012) 'Ageing in the 21st Century: A Celebration and Challenge'. United Nations Population Fund and Help International. Downloaded from http://www.unfpa.org/public/op/edit/home/publications/pid/11584. Accessed 25.05.2013

UN (2013) A New Global Partnership: Eradicate Poverty and Transform Economies Through Sustainable Development: The Report of the High-Level Panel of Eminent Persons on the Post-2015 Development Agenda. New York: United Nations Publications

Vadrot, A.B.M. (2011) "Innovation – not just a technical and economic problem!" *Innovation: The European Journal of Social Science Research*, 24:1-2, 1-5, DOI: 10.1080/13511610.2011.589277

Van Dyck, B. and Van den Broeck (2013) Social innovation: a territorial process, in Moulaert, F., MacCallum, D., Mehmood, A. and Hamdouch, A. (eds) (2013a) *The International Handbook on Social Innovation: Collective Action, Social Learning and Transdisciplinary Research*. Cheltenham: Edward Elgar.

Von Hippel, E. (2005) *Democratizing Innovation*. Cambridge, Mass: MIT Press

Wenger, E. (1998) Communities of Practice: Learning, Meaning and Identity. Cambridge: Cambridge University Press

Wintjes, R., Turkeli, S. and Henning, F. (2013) "Innovation Policy in Metropolitan Areas: Addressing Societal Challenges in Functional Regions". Regional Innovation Monitor, Thematic Paper 6. Prepared for DG Enterprise and Industry. Available at http://ec.europa.eu/enterprise/policies/innovationpolicy/regional-innovation/monitor/index.cfm?q=p.file&r=93f31790bd2a678684279f7b3315c2d Last accessed 26.12.13

Wolfe. D.A., and Bramwell, A. (2008) "Innovation, creativity and governance: Social dynamics of economic performance in city-regions" *Innovation: management, policy and practice* 10: 170-182

Wolfe, D.A. and Nelles, J. (2010) 'The role of civic capital and civic associations in cluster policy'. in Charlie Karlsson, ed., *Handbook of Research on Innovation and Clusters: Cases and Policies* (Cheltenham, UK: Edward Elgar, 2008), pp. 374-392.

World Economic Forum (2012) "Global Agenda on Social Innovation." See http://www.weforum.org/content/global-agenda-council-social-innovation-2012-2014

World Health Organization (2012) "Ageing and Life Course: interesting facts about ageing." Available at: http://www.who.int/ageing/about/facts/en/ Last accessed 18.12.13

Young Foundation (2013) "The Young Foundation and Health: The NHS and Civil Society". Available at: http://youngfoundation.org/wp-content/uploads/2013/03/NHS-and-Civil-Society.pdf