I. Introduction

1. The present note presents good practices and policy recommendations on aligning entrepreneurship and innovation policies. It draws on the outcomes of the International Conference “Entrepreneurship and Innovation: Making Things Work Better”, which was held in Dubrovnik, Croatia on 23-24 May 2013, in cooperation with the Croatian Ministry of Entrepreneurship and Crafts.¹

2. This note was originally submitted to the eighth session of the Committee on Economic Cooperation and Integration as document ECE/CECI/2014/9. At the time, the Committee agreed that the note should “be circulated to member States and relevant stakeholders for further elaboration by means of interactive electronic discussions” (ECE/CECI/2014/2 para. 47 p.10). The present note reflects the results of these discussions.

3. The note is structured as follows. After the introduction, the second section outlines the importance of entrepreneurship for innovation in modern economies. The third section discusses how collaboration can enhance the innovation capabilities of small and medium enterprises (SMEs). The fourth section presents some instruments to address the particular financing problems of innovative SMEs. The fifth section introduces so-called “smart specialization” strategies, which are based on a process of entrepreneurial discovery. The sixth section discusses social entrepreneurship. The seventh section provides the main conclusions and recommendations.

¹ The presentations can be found at http://www.unece.org/index.php?id=32036.
II. Entrepreneurship and innovation

4. Entrepreneurship and enterprise creation are major forces driving change in modern economies. Innovation is a complex process in which many actors interact – firms, suppliers, customers and research and education organizations – in a context defined by the business environment and public policies. But at the heart of innovation, there is always an entrepreneur who is ready to take risks, bringing together the necessary financial, physical and personal assets and transforming an idea into a product or service that has market value.

5. The promotion of entrepreneurship should, therefore, be an integral component of a strategy seeking to encourage innovation and structural change. However, despite the recognition of the importance of SMEs and entrepreneurship for innovation, there is still scope for a better integration of the particular concerns of SMEs into traditional innovation policies.

6. The increasing importance of entrepreneurship and SME development for innovation is underlined by prevailing views on how innovation emerges in modern economies, which give a significant role to SMEs. These firms can recognise and exploit opportunities in a flexible way, sometimes catering to niche markets, without being tied up by the organisational and legacy issues that force large companies to be more conservative in exploring development options.

7. Existing large companies often have difficulties in adapting to changing environments or introducing radical innovations, since these may negate the value of their existing assets or business models. Industry leaders perform well sustaining innovation along existing lines, but new ideas and disruptive innovations often find a more fertile ground outside established corporations, hence the importance of SMEs.

8. New technologies have made economies of scale, which were a major advantage of large companies, a much less powerful constraint in the ability of SMEs to innovate. In the current environment, innovation is the result of complex forms of collaboration where SMEs can also participate. The growing importance of services in modern economies, where closeness to customers and flexibility in meeting their needs are more necessary for commercial success than large Research and Development (R&D) spending, has also increased the role of SMEs in driving innovation.

9. Promoting innovation goes beyond the traditional focus on R&D spending and science policies. Once the focus is widened to include the exploitation and dissemination of scientific knowledge and once the importance of non-technological change and the services economy are recognised, the critical role of SMEs in innovation becomes apparent.

10. There are a number of areas of common concern in the promotion of both innovation activities and entrepreneurship that policies need to take into account. Framework conditions, in particular, are one such area. The features defining a business environment conducive to entrepreneurship and innovation include policies that affect the economy as a whole, such as: macroeconomic stability, labour markets, tax policy, security of property rights, a reliable legal system and bankruptcy laws.

11. Barriers to entry prevent competition and therefore discourage economic dynamism. In general, SMEs feel more strongly the impact of regulations, given their size, which limits their ability to allocate the necessary resources to deal with these regulations.

12. An innovation culture is increasingly seen as an important element encouraging the development of new ideas and their commercial application. A key dimension of this culture is a wide social recognition of the value of entrepreneurship, where entrepreneurs are seen as positive role models, job-creators and innovation drivers. Media and awareness
campaigns can contribute to promoting this positive social perception. Entrepreneurship education at all levels serves not only to teach relevant skills but also to promote suitable values and attitudes.

13. There is a particular group of SMEs who play a larger role in the dynamism of the economy. These high-growth SMEs account, in most countries, for the bulk of employment creation and productivity growth. However, there are important differences across countries in the development of these high performers. The business environment should be particularly attuned to the needs of these high-growth firms, being conducive to their rapid expansion.

14. High-growth SMEs are often radical, disruptive innovators. For other SMEs, which are more likely to be engaged in incremental innovation, the policy target should be to increase their capacity to absorb external knowledge, thus raising their innovation capabilities. This target points to the importance of developing relevant skills among the workforce through the use of instruments to facilitate the exchange of knowledge, such as science parks, policies that encourage staff mobility and other types of linkages with universities.

III. The role of collaboration

15. Innovation is a collaborative process which results from the interventions of many actors. Open innovation acknowledges that internal resources are not sufficient to identify and develop promising ideas and that it is important to use also external resources. These resources can be gathered through various forms of collaboration with research organizations, suppliers, customers and even competitors.

16. The role of collaboration is particularly important to SMEs. Given their limited size, they require access to external sources of knowledge and technology to complement their assets. Participation in networks that facilitate the circulation and sharing of this knowledge and other assets is important. Policy needs to support SMEs in their efforts to join knowledge networks and to develop the internal capacities to exploit the information gained so it results in effective innovation.

17. Knowledge-networks have a strong international dimension, as innovation has become globalised. Opening up the participation of SMEs in international networks is important both for the identification of potential markets and for inputs to product and service development. At the same time, this is an area where the costs of acquiring information are particularly high. Policy interventions could be deployed to facilitate the insertion of SMEs into these global knowledge networks.

18. Innovation often takes place within global value chains. Therefore, openness and access to innovation networks are important for technological learning. Information and communication technologies (ICT) have a particular significance as general purpose technologies that make the adoption of new business models possible and create opportunities for tapping into new sources of knowledge.

19. Developing linkages is seen as a major goal of modern innovation policy, with specific instruments that target collaboration between different innovation stakeholders: research institutions and business, large and small companies and various forms of consortia and collaborative arrangements. As regards financing, the collaboration between the public and private sectors is essential in order to facilitate the access of SMEs to the resources necessary to support their development.

20. SMEs are particularly relevant to a critical dimension of the innovation system: the transformation of research (inputs) into commercial applications (outputs). Research and
Education organisations are a source of ideas that can be commercially exploited. Entrepreneurial talent is necessary to transform this potential into viable commercial proposals, through the creation of spin-off companies or the use of the resulting knowledge through licensing and technology agreements.

21. SMEs can establish symbiotic relationships with large, established companies, where SMEs provide the flexibility and adaptability that is lacking in large companies who in turn provide access to markets, finance and technology. Policy can encourage this type of collaboration by addressing existing barriers, such as lack of information and skills, and offering positive incentives, such as making the provision of public resources contingent on the formation of appropriate collaborative arrangements.

IV. Entrepreneurship financing

22. Access to finance is a major difficulty for SMEs, given the perceived high uncertainty of their development prospects and limited collateral to support their financing requests. In the case of start-ups, which have no track record that can be used to assess their creditworthiness, and innovative SMEs, which may confront significant technological and other risks, raising finance becomes an even more serious challenge.

23. Specialised financial intermediaries, such as venture capital (VC) firms, can provide not only financial resources but also managerial and technical expertise as well as a wealth of contacts that can support the growth of promising companies. However, these intermediaries may not be sufficiently developed or may not engage with early-stage companies, which present more uncertain prospects.

24. Given the reluctance of the private sector to take on these risks, public support is necessary to address this critical constraint. The ultimate aim of public intervention is to increase the overall amount of private financing available to SMEs. Thus, the policy objective should be to play a catalytic role that encourages private financing rather than replacing missing private resources with public funding. Long-term provision of public financing to support this goal creates continuity and stability, thus contributing to attract the interest of the private sector.

25. International policy experiences suggest that the involvement of the state in venture capital investment works best when it is done in an indirect way and in collaboration with private investors. This means that the public sector should contribute resources to co-investment schemes where the direct responsibility for investment decisions lies with experienced private investors. This indirect intervention is the dominant form of public support to early-stage venture capital financing, in what is called “hybrid” venture capital funds.

26. However, participation in the capital of a fund may not be sufficient to overcome the reluctance of venture capital companies to be involved in early stage financing, as it does not address the problem of high uncertainty and mixed returns. Different “equity enhancement” arrangements have been put in place in some countries resulting in risk-return ratios that are more favourable for private investors. Asymmetric sharing of risk and rewards represents a departure from the traditional pari passu (equal ranking) principle but creates stronger incentives for private sector participation.

27. In countries where the venture capital industry is less developed, there may be a deficit of the necessary expertise. Therefore, additional funds are unlikely to result in the sort of beneficial effects associated with venture capital, if they are not accompanied by additional measures to address this skill shortage. Public programmes can provide a training ground for the first generation of venture capitalists.
28. Business angels\(^2\) tend to be the dominant investors in the seed and start-up phases of new companies, with the ability to screen many opportunities and invest in many companies that would not attract the attention of formal venture capitalists. The successful development of a company requires that financing is available through the various stages of its life, avoiding any possible bottlenecks.

29. There is an increased awareness of the critical role that business angels play in nurturing the initial development of innovative SMEs in many European countries. This arises from the realization that professional venture capital investors are not going to solve the equity gap present at an early stage, where deal sizes are small and returns very uncertain.

30. The role of these informal investors has received growing policy attention. Support to the formation of networks and training initiatives are the most widespread instruments to promote business angel financing. Tax incentives are more controversial and should be designed in a way that encourages risk-taking by experienced individuals, avoiding implicit guarantees that could result in adverse selection. Co-investment schemes with the public sector have also emerged in some countries.

31. Financing is not the only problem constraining the development of innovative SMEs, which often lack management competencies needed to attract investors and grow internationally. To address this, the provision of finance can be linked to “investment readiness” programmes which increase the chances of raising private capital. The involvement of experienced entrepreneurs and investors in designing and running these programmes ensures that they are tailored to meet real needs.

V. Smart specialization and entrepreneurship

32. Entrepreneurship plays a central role in “smart specialization” strategies, which emphasise public support to a process of entrepreneurial discovery, leading to the emergence of new comparative advantages on the basis of existing strengths and collaborative efforts between different stakeholders.

33. Smart specialization strategies seek to create an environment that facilitates innovation by identifying leaders who are driving changes and providing support to them, so that initial advantages are consolidated. The process of entrepreneurial discovery involves multiple agents and results from the interaction between enterprises, science and technological parks, universities, industry associations and other organisations.

34. Collaboration between the public and private sectors is a key element in the design and implementation of these innovation-based strategies that promote changes in the economic specialization of productive sectors, aiming at higher economic diversification and increases in added-value activities with growth potential.

35. These “smart specialization” strategies, which are being pursued at both the national and subnational levels, focus on specific sectors, which emerge as particularly important to increasing competitiveness. The aim is to generate new solutions that respond to global market trends, so as to consolidate new competitive advantages.

36. The reliance on entrepreneurship makes this approach different from the old industrial policies of “picking winners”. However, strong public intervention remains necessary. In the process of discovering new competitive advantages, the returns that could

\(^2\) Business angels are individuals, often with an entrepreneurial background, who invest their own money in promising companies.
be captured by individual entrepreneurial pioneers are limited, so investments would be low in the absence of public support. A number of complementary activities may also need to be developed simultaneously. These are beyond the reach of the individual entrepreneur and require targeted interventions where the public sector provides the necessary strategic guidance and helps to mobilize and coordinate different private sector participants.

37. The challenge is how to support activities with growth potential and facilitate restructuring rather than preserving artificially the viability of sectors that show little future. This requires the creation of an environment where entrepreneurial discoveries can take place and a strong emphasis on competition. In order to ensure sustained and sustainable growth, the public sector would also need to incorporate elements that contribute to environmental sustainability and social development when articulating these strategies.

38. Appropriate mechanisms for the evaluation of public support are essential, so public resources are devoted to areas that show the greatest probabilities of success. Public initiatives should also disseminate information among potential partners and facilitate the links between different actors.

VI. Social innovation and social entrepreneurship

39. Social entrepreneurship is increasingly seen as a contributor to addressing social challenges through innovation, thus complementing efforts by the public sector in this area. While ordinary entrepreneurs seek to exploit market opportunities, the aim of social entrepreneurs is to solve social problems, bringing an entrepreneurial approach to tackling these challenges. In some cases, these two aims may coincide, but the primary goal of the social entrepreneur is social change.

40. Social entrepreneurship may require specific legal and regulatory frameworks that take into account the social goals being pursued and support the stability and sustainability of these initiatives. Public social programmes can be a source of opportunities for social entrepreneurs, so communication campaigns and close dialogue with established associations could be useful instruments.

41. In particular, public procurement may incorporate provisions that provide room for initiatives by social entrepreneurs. However, competition in public bids requires access to information and the existence of skills that may be absent among small social entrepreneurs. Policy should aim to fill this gap, in order to engage them more effectively in the provision of public services.

42. Public authorities could also encourage networking among social entrepreneurs, as this would contribute to the dissemination of information and the pooling of efforts to undertake joint projects. Ensuring greater visibility of social entrepreneurs’ initiatives would also promote role models that encourage others to follow.

43. Running social enterprises also requires traditional managerial and accounting skills, which are often in short supply in the not-for-profit sector. Enhancing these skills could be a target for policies to support the development of social entrepreneurship.

44. Just as for ordinary SMEs, access to finance is difficult for social entrepreneurs. It is, therefore, important to develop appropriate funding sources, relying on the combination of public and private efforts and the creation of suitable financial instruments with the involvement of financial institutions and large corporations.

45. Social entrepreneurs, like other entrepreneurs, can benefit from the help provided by SME support agencies. However, dedicated efforts within these agencies to tailor the
assistance provided in order to take into account the particular needs of social enterprises would contribute to developing and providing better advice.

VII. Main Conclusions and Policy Recommendations

46. Entrepreneurship and SME development play an important role in driving innovation in modern economies. A close alignment between entrepreneurship and innovation policies would contribute to improving innovation performance and increasing the efficiency of national innovation systems.

47. In order to enhance the contribution of entrepreneurship to innovation, the following recommendations might usefully guide policy in this area:

(a) Recognise the role of SMEs in innovation strategies, going beyond the traditional focus on R&D in large companies and technological change in manufacturing;

(b) Create favourable framework conditions for the development of entrepreneurship, with particular attention to regulatory burdens and competition issues;

(c) Promote an innovation culture that recognises the value of entrepreneurship and celebrates the role of entrepreneurs as job creators and innovation drivers;

(d) Facilitate access by SMEs to external sources of knowledge and technology to complement their assets, including international sources;

(e) Support the development of the necessary skills among staff in SMEs to absorb external knowledge;

(f) Establish an appropriate legal and regulatory framework to support the creation of spin-offs from research and education organisations and encourage close relations between these organisations and SMEs;

(g) Promote collaboration between SMEs and large companies through information campaigns and financing instruments;

(h) Develop arrangements that attract private financing to early-stage companies and contribute to the development of specialised financial intermediaries, including through co-investment funds and network support;

(i) Introduce “investment readiness” programmes that enhance the attractiveness of companies in the eyes of investors;

(j) Design “smart specialization” strategies that rely on the collaboration between various public and private stakeholders to promote the emergence of new competitive advantages through a process of entrepreneurial discovery; and

(k) Provide specific support to the development of social entrepreneurship through the tailoring of assistance programmes, the upgrading of skills and the creation of opportunities through social programmes and procurement specifications.