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Committee on Innovation, Competitiveness and Public-Private Partnerships

Team of Specialists on Innovation and Competitiveness Policies**Twelfth session**

Geneva, 5 – 6 December 2019

Report of the Team of Specialists on Innovation and Competitiveness Policies on its Twelfth session**I. Attendance**

1. The Team of Specialists on Innovation and Competitiveness Policies held its twelfth session on 5 – 6 December 2019.
2. A total of 121 delegates participated in the session representing national government ministries and agencies, academic institutions, the private sector, non-governmental organisations and international organisations.
3. Delegates from the following ECE member States attended: Albania, Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Czechia, Georgia, Germany, Israel, Italy, Kazakhstan, Kyrgyzstan, Luxembourg, Republic of Moldova, Russian Federation, Slovenia, Spain, Sweden, Switzerland, Tajikistan, Ukraine, United Kingdom, and Uzbekistan. Representatives of the following countries outside the ECE region participated: Ecuador, Gambia, and India.
4. Representatives of the Cities Alliance, EIT Climate-KIC, the European Commission, European Investment Bank, International Telecommunication Union, International Trade Centre, Organisation for Economic Co-operation and Development (OECD), United Nations Conference on Trade and Development (UNCTAD), United Nations Human Settlements Programme (UN-HABITAT), United Nations Office for the Coordination of Humanitarian Affairs (OCHA), World Bank, World Economic Forum, World Health Organization (WHO), and the World Intellectual Property Organization (WIPO) participated in the session.
5. Representatives of the following non-governmental organizations also attended: Aga Khan Agency for Habitat, Kyiv Smart City Initiative, Center for Socio-economic Development, CUTS Institute for Regulation and Competition, Women@TheTable.

II. Adoption of the agenda (agenda item 1)

6. Mr Salvatore Zecchini of Italy, Chair, opened the twelfth session of the Team of Specialists on Innovation and Competitiveness Policies and welcomed the delegates. Mr



Anders Jonsson, Chief, Innovative Policies Development Section, Economic Cooperation and Trade Division of UNECE, delivered opening remarks.

7. The Team adopted its agenda as contained in document ECE/CECI/ICP/2019/1.

III. Substantive segment Part I (agenda item 2)

8. The substantive segment of the twelfth session of the Team of Specialists was devoted to “Smart and Sustainable Cities: the Role of Governance and Innovation Policy”. It provided an opportunity for international knowledge sharing, exchanges of experience and policy learning in this area.

9. Policy makers and experts from across the ECE region discussed the role of cities as hubs for innovation that could drive long-term sustainable development, what constitutes a smart and sustainable city and why innovation is at the centre of its transformation. In this framework, participants discussed a paradigm shift from a technology and infrastructure-focussed view of smart cities to one that enables and provides platforms for broad experimentation with new ideas for the benefit of all.

10. As recognized by the OECD, over the past two decades, “smart cities have proliferated around the globe as a way to build more efficient and liveable urban environments”. Initially, the concept of “smart cities” was widely used as a trigger to upgrade urban economies through the increased efficiencies gained by the widespread adoption of new technologies and services in transport, buildings, energy and ICT, and the upgrading and inter-linking of infrastructures. However, in recent years, the concept has been expanded to “smart and sustainable cities”, a more holistic view that aims to capture the social, cultural, environmental and financing aspects to enhance impact and longevity. Increasingly, governments recognize that smart city projects are not determined by hard technologies or technical capital alone, but are dependent on leadership, stakeholder coordination and citizen engagement.

11. The discussions and the experiences shared highlighted that more and more cities have turned to the broader vision of “smart sustainable cities” as a means to improve cities’ competitiveness and economic productivity, the quality of life of inhabitants, and environmental sustainability. This ambitious pursuit takes place in a rapidly urbanising world, including the ECE region where urban areas already host over 75% of the population in Europe, 80% in North America, and close to 50% in Central Asia. Moreover, many cities are facing a range of sustainable development issues, including traffic congestion, unsustainable use of energy and other resources, pollution, threats to human health, ineffective waste management and unaffordable housing.

12. Innovation is critical in responding to these complex challenges – not only for the cities themselves, but in contributing to sustainable development on a larger, even global scale, and as a means to fulfil the 2030 Agenda for Sustainable Development, including Sustainable Development Goal 9, “Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation” and Goal 11, “Make cities and human settlements inclusive, safe, resilient and sustainable”.

13. The segment had four sessions:

- (a) Session 1 – Cities as hubs of innovation and sustainability solutions;
- (b) Session 2 – Innovation tools for making cities smarter and more sustainable;
- (c) Session 3 – Citizen engagement in innovation and smart and sustainable city solutions;
- (d) Session 4 – Smart sustainable city key performance indicators (KPIs) and monitoring transformation.

Cities as hubs of innovation and sustainability solutions

14. While there is no generally accepted definition of what is a “smart and sustainable city”, the pivotal role of innovation, the integration of information and communications

technologies, the aim of enhancing efficiency of urban operations and services, and the imperative to meet citizens' economic, social, environmental and cultural needs are commonly recognised as being central to the concept of smart and sustainable cities.

15. Smart and sustainable cities have also been characterized by their dynamism, such as their cultural vibrancy, which can in turn be a driver for economic development in itself. The case of Berlin, a city that, until recently, despite a less developed economy and relatively modest wages, managed to attract talent from across Europe due in large parts to its cultural diversity and appeal, illustrates this.

16. The approach to making cities smart and sustainable has evolved from focusing on significant top-down investments in infrastructure, including broadband infrastructure and e-government services (smart cities 1.0) to a more bottom-up approach, enabling and creating platforms for drawing on ideas of citizens, entrepreneurs, researchers, and policy makers (smart cities 2.0).

17. In recent years, leading cities have also strived to better integrate technology with infrastructure and social objectives, and to enhance their inclusiveness and the active participation of all citizens. Marginalised groups of society, lower income groups, women, people with disabilities, young people, and senior citizens are often at risk of exclusion.

18. There is in fact a risk that digital technologies themselves, such as artificial intelligence, may introduce or even exacerbate biases in policy design and service delivery against, for instance, women. Artificial intelligence and machine learning are based on data, and many data collected today are "gender-blind" and do not adequately reflect women's life experiences and needs. As a result, needs and solutions generated with the help of machine learning may identify male needs as the standard and may not cater adequately to the needs of half the population.

19. A case in point is municipal transport infrastructure developed predominantly based on average male user patterns, i.e. linear travel trajectories between home and work and relatively heavy use of private rather than public transport. Gender-disaggregated data show that on average, women use public transport more often than men, and their travel trajectories more often involve multiple stops between home and work, such as to take children to see the doctor, or pick them up from school.

20. To manage the risk of digital technologies exacerbating this kind of bias, data should be collected on a gender-disaggregated basis, and women and men should both be represented adequately in policy design and service delivery. Similar attention should be paid to avoiding any biases according to age or disability.

21. Part of the debate also centred on the importance of policy coordination between central, regional and municipal governments when building and fostering smart and sustainable cities and the need for consensus and alignment among different levels of government.

22. The central government has a role to play in financing or underwriting finance for initiatives implemented at the city level, as well as in collaborating with local governments and ensuring the success of their policies.

23. It was also noted that central governments need to provide the overall vision for innovation, smart city transition and issues surrounding data privacy. Canada was mentioned as a good practice example due to its bottom-up approach. One initiative was the "smarter cities challenge", where residents were given the opportunity to voice their concerns and their proposals to improve their cities. The government also set up an infrastructure bank, which allowed risky, innovative products to obtain financing. The "Smart Qatar" and "Smart Portugal" initiatives allow national and local level governments to cooperate and coordinate their objectives and financing.

24. Despite the emergence of many successful smart and sustainable cities, there are no one-size-fits-all templates that can be universally applied to create smart and sustainable cities. Solutions need to be adapted to the local context and the focus should be on the desired outcomes, rather than perceived problems and deficits. Simply copying ideas that may have

proven useful in one context often fails. There was broad agreement that solutions cannot be mass deployed.

Innovation tools for making cities smarter and more sustainable

25. The discussion highlighted a range of examples and different approaches that cities across the ECE region are taking to become “smart” and “sustainable”. Among the issues discussed were

- (a) the need for a “place-based”, heavily contextualized approach,
- (b) the imperative of citizen-centered rather than technology-driven innovation,
- (c) the need for and benefits of multi-stakeholder cooperation in designing and delivering smart sustainable solutions,
- (d) smart sustainable communities below the city level and the interaction between large cities and their hinterlands,
- (e) smart regulation of digital technologies,
- (f) financing needs and the role of public procurement in driving innovative and inclusive solutions,
- (g) the benefits of experimentation in identifying sustainable solutions and managing the risk inherent in scaling innovations,
- (h) involving academia in the development of smart cities.

26. Technical innovations and ICTs offer new opportunities for managing cities more effectively and for delivering better quality of life and better economic performance in a sustainable way. Cities have a broad range of applications at their disposal that they can tailor to support initiatives such as smart buildings, smart water management, intelligent transport systems, and new efficiencies in energy consumption and waste management.

27. At the same time, it was emphasised that technology is a tool, not an end in itself, and must be viewed as part of a greater ecosystem of innovation. Smart city and innovation policies, strategies and projects need to be context-specific and human-centered, and they cannot necessarily be directly replicated in different contexts.

28. The city of Barcelona, a well-known smart city pioneer, is now aiming to be an “open, inclusive, circular and democratic city”, where citizens are at the centre, and technological solutions are developed in an open, transparent collaboration between the administration, the business community, the academic community and citizens (“quadruple helix”) to address societal challenges. Barcelona’s iLab also promotes a culture of innovation and experimentation inside the city administration.

29. The topic of smaller cities and rural communities in the context of smart and sustainable cities was also addressed. On the one hand, larger cities enjoy agglomeration benefits, such as a higher concentration of people, resources, institutions and infrastructure, which facilitate the development of smart sustainable solutions.

30. It has been observed frequently that such solutions do not necessarily scale easily, i.e. they are often not adopted broadly by other, particularly smaller cities and rural communities. This carries the risk of widening gaps in quality of life and economic performance between large cities and the rest. Several examples were given of open inter-operability standards that have been developed to support the scaling of smart city solutions.

31. On the other hand, cities also generate agglomeration costs such as pollution, emissions, or congestion that can make adjacent smaller communities more attractive. Smart digital technologies can create new patterns of mobility, living and working between larger urban centers and their hinterland.

32. There was broad agreement that small cities and even villages do have the potential to become smart and sustainable, and that in the long-term, large cities can only thrive if they are well-connected to a thriving hinterland. Smart city strategies at the municipal level

therefore should be complemented by regional development strategies that support the hinterland.

33. Digital technologies can pose challenges in terms of data sovereignty and privacy and in terms of a level playing field for all companies. Smart regulation has a key role to play in protecting citizen rights and competition, while also enabling rather than blocking experimentation and innovation.

34. While regulation in these fields is mostly not set at the municipal but at the national level, cities can sometimes serve as laboratories for testing different regulatory approaches and their effects. Three approaches to regulation were mentioned in this regard: advisory (i.e. advising on how to apply existing regulations), adaption (changing regulations based on feedback from innovators), and anticipatory regulation (proactively identifying future regulatory requirements through horizon scanning exercises, including at municipal level).

35. So-called “innovation testbeds” can be used to test whether existing regulations are fit for purpose in a changing technological environment. More generally, innovation testbeds are agile policy innovations that can be used for a variety of experiments, ranging from testing whether a particular technology works as expected to testing innovative solutions to societal challenges.

36. Testbeds integrate different policy tools to support innovation and create a flexible environment for testing and evaluation. They are most commonly used as a local experimentation development tool but can also be included in national strategies given their potential for improving the efficiency and design of policy-making.

37. Public procurement processes need to be leveraged to boost innovation in sustainability, with the public sector progressively becoming a key factor in investing into new technologies. Public procurement can also be used as a tool to promote inclusiveness. However, only part of the investment required for innovation can be mobilised through city budgets. In this regard, city governments cannot innovate alone but need to engage in partnerships with business and citizens (PPPPs or People First Public-Private Partnerships).

Citizen engagement in innovation and smart and sustainable city solutions

38. The panel of experts concurred that citizen engagement is critical for devising and implementing smart sustainable city policies and initiatives. Beyond citizens, leading smart sustainable cities also engage with an even wider circle of stakeholders – businesses, public authorities, academia and research institutions – to work towards sustainability.

39. The various approaches and experiences shared during the session highlighted that citizen engagement can take various forms, from one-off face-to-face consultations, workshops, and events, to online platforms, co-creation and social innovation.

40. The digital revolution has helped to improve the interaction between governments, service providers and the public in decision-making, awareness-raising and transparency. At the same time, it was emphasized that digital technologies cannot and should not be the only means for citizens to engage with administrations.

41. Meaningful citizen engagement should start early and create opportunities for citizens to identify the problems they think are important and, where possible, participate in co-creating the solutions. It is beneficial if citizens can play a role in implementing the solutions, monitoring progress and evaluating the results.

42. To make citizen engagement meaningful and to ensure the legitimacy and effectiveness of the resulting decisions, the process needs to be inclusive.

43. For citizens and businesses to be able to fully participate in developing innovative solutions to municipal challenges, cities should also open their data for access, while safeguarding privacy and data sovereignty.

44. To facilitate citizen engagement, government procurement should make space for contractors to engage with citizens to identify problems and co-create solutions. Inclusive budgeting processes, in which citizens are given a direct say in how cities spend their funds, are another form of citizen engagement.

45. Cities need to develop a culture of having a co-creative, participative and cross-sector approach to designing and implementing smart and sustainable local solutions across all levels of the administration. Citizen engagement needs to be genuine, rather than simply part of a token checklist that needs to be worked through. To achieve this, capacity building and training of city officials and civil servants in citizen engagement is crucial.

46. One of the key benefits of enhanced citizen engagement is in tackling key societal challenges such as climate change. Introducing individual technological innovations one at a time simply will not be enough for the scale and speed of change required. Different levers of change need to be acted upon simultaneously to bring about systemic and behavioural change. Citizen engagement is a key lever here. Deeper engagement from city authorities and wider representation of citizens involved is required to make solutions more inclusive and impactful. According to EIT Climate-KIC, the smart and sustainable development solutions that have the most lasting impact are those in which the local citizens have been involved, empowered and given a sense of ownership in the process.

Smart sustainable city key performance indicators (KPIs) and monitoring transformation

47. The Moderator opened the discussion by referring to an OECD study which found that only “16% of cities with formal innovation goals conduct a comprehensive and systematic evaluation of the impacts of their innovation strategy”¹. This highlights that while many cities claim to be “smart and sustainable” and invest in solutions to achieve these aims, many do not have the structures in place to evaluate their progress.

48. The experiences shared by UNECE, ITU, the city of Pully and 2ThinkNow showed that an important part of experimentation and testing various initiatives is being able to self-assess – including to identify and evaluate outcomes, and if possible, positive and negative impacts on people, places and the environment. In this respect, key performance indicators (KPIs) and monitoring are useful in setting measurable targets, identifying impacts and evaluating an initiative’s success.

49. Standardized KPIs are also a useful tool for cities to self-assess where they currently stand on various metrics of smartness and sustainability as a basis for identifying needs and gaps.

50. Much of the discussion centered on the question how smartness and sustainability can be measured in a comparable way across cities using consistent and standardized methods of collecting data, while doing justice to the fact that solutions need to be adapted to local contexts, and on the question how to measure not only the extent to which a city has become smart, but more importantly, what impact smartness has on quality of life, economic growth and environmental sustainability.

51. Communicating the results of the assessments clearly to citizens and administrators can also be a challenge.

52. There are several ways to combine standardized measurement frameworks with the need for place-based approaches to smartness and sustainability. One is to provide a set of core indicators relevant for most cities, and a separate set of additional indicators that are mostly relevant for cities in more advanced countries.

53. Another is to use an initial assessment on the basis of standardized KPIs as an input for creating detailed city profiles which provide the necessary local context and derive recommendations and concrete innovation projects to induce positive change.

54. Regarding the challenge to measure the impact of greater smartness on quality of life and other goals, the panel agreed that certain correlations have been established, e.g. between good city infrastructure and good city governance on the one hand, and innovation and quality of life or economic growth on the other, but that establishing causality has remained difficult.

¹ OECD 2019, Enhancing Innovation Capacity in City Government: <https://www.oecd.org/publications/enhancing-innovation-capacity-in-city-government-f10c96e5-en.htm>

55. There are several tools and methodologies that cities can use to monitor and measure their progress in becoming smart and sustainable. The United for Smart and Sustainable Cities (U4SSC) is a global platform dedicated to developing practical tools and deliverables that support cities in leveraging digital technologies to become smarter and more sustainable. One of these tools is the KPIs for smart sustainable cities, which allows city planners to analyze the ways in which ICTs have improved the economic, environmental, and social and cultural aspects of their cities according to the parameters set in the 2030 Agenda.

56. The city of Pully was one of the first to apply the U4SSC KPIs. Its experience highlights that smaller cities can also lead the transition towards becoming smart and sustainable. The U4SSC initiative has allowed the city of Pully to work together with other cities of a similar size and character, to learn from and help each other reach their goals.

57. In addition to Pully, over 100 cities have already partnered with the U4SSC in implementation these indicators, such as Dubai, Singapore, Moscow, Riyadh, and Valencia. From 2019 to 2023 evaluations of 17 Norwegian cities, Nursultan (Kazakhstan), Grodno (Belarus), Bishkek (Kyrgyzstan), Tbilisi (Georgia), Tirana (Albania), Podgorica (Montenegro), and Almaty (Kazakhstan) are planned. The KPI evaluations will support these cities in establishing and meeting sustainable and smart city goals, and ultimately in the realization of the 2030 Agenda for Sustainable Development.

58. The 2ThinkNow Innovation Cities Index covers over 500 cities and contains over 162 indicators, relating to innovation, smartness and human factors. Its experience has showed that while regions, including rural areas and smaller cities, can be innovative, it is the larger cities which predominantly drive innovation, such as London, Berlin and Barcelona.

IV. Review of the work of the Team of Specialists on Innovation and Competitiveness Policies since the eleventh session (Agenda item 3)

A. Discussion on the high-level innovation policy principles for sustainable development

59. Following and building on the discussions held at the eleventh session of the Team of Specialists in 2018 and the thirteenth session of the Committee on Innovation, Competitiveness and Public-Private Partnerships in 2019, the Team of Specialists discussed a proposal for draft Terms of Reference of the Task Force for the development of high-level innovation policy principles for sustainable development (ECE/CECI/ICP/2019/INF.1). The principles are meant to guide further regional policy dialogue to review, design, reform, and harmonize innovation policies and institutions in ECE countries.

60. The delegation of Armenia welcomed the initiative to develop high-level innovation policy principles and proposed a number of issues to be included. The secretariat invited Armenia to join the proposed Task Force.

61. The delegation of Kyrgyzstan highlighted the usefulness of the Innovation for Sustainable Development Review of Kyrgyzstan, recently completed by ECE, and in particular the plan of measures to implement recommendations of the Review, which was presented at the Scientific and New Technologies Council and shared with all relevant ministries and public bodies.

62. Secondly, Kyrgyzstan has prepared a new draft Law on Innovation, including reform principles highlighted by recommendations from the Review, with more than 50% of the current Law being modified. As a second aspect of implementation efforts, 2020 will be announced as the Year of Innovation in Kyrgyzstan, and a new Innovation Centre will be opened in Bishkek.

63. Kyrgyzstan invited ECE to continue to support implementation efforts in the country, with the opening of the Innovation Centre planned for 2020 providing one such opportunity.

64. The delegation of Ukraine briefed the Team on the policy principles of Smart Specialisation Strategies, including innovation principles, which are being incorporated into subnational governance within the country. Support from the Team in implementing this agenda would be much appreciated.

65. The Team emphasised the importance of mainstreaming sustainable development considerations into any high-level innovation policy principles, including distributional considerations and avoiding policy capture by special interests.

66. The Team agreed on the draft Terms of Reference for the Task Force on High-level Innovation Policy Principles for Sustainable Development and asked the secretariat to convene the Task Force.

B. Discussion of the draft methodological guide for the national Innovation for Sustainable Development Reviews

67. The Team of Specialists discussed the annotated outline of the methodological guide for the national Innovation for Sustainable Development Reviews (ECE/CECI/ICP/2019/INF.2), developed in response to the discussion at the thirteenth session of the Committee on Innovation, Competitiveness and Public-Private Partnerships in March 2019 (ECE/CECI/2019/2, Annex II, para. 6).

68. The delegation of Armenia highlighted the value of national policy reviews carried out by ECE over many years. Across many countries in the region, these have been the main source of concise and useful analysis of national innovation systems with evidence-based reforms.

69. Useful reforms of the science sector in Armenia were carried out based on recommendations of a previous Innovation Performance Review of Armenia, and policymakers are looking forward to a second-round Innovation for Sustainable Development Review of Armenia to assess progress and make recommendations for further reforms.

70. The delegation of Georgia expressed their gratitude for the excellent work being done by the Team for both the country and subregion and briefed the Team on latest developments at the Georgia Innovation and Technology Agency. The delegation also highlighted the usefulness of the fact-finding mission for the Innovation for Sustainable Development Review of Georgia coinciding with the recent Europe-Asia Connect for Startups event that took place in Tbilisi.

71. The Team welcomed the development of the draft methodological guide for the national Innovation for Sustainable Development Reviews.

C. Discussion on progress with the Subregional Innovation Policy Outlook (IPO)

72. The Team of Specialists discussed the progress with the implementation of the pilot iteration of the Subregional Innovation Policy Outlook (ECE/CECI/ICP/2019/INF.3) following a presentation by the Secretariat.

73. Since the eleventh session of the Team of Specialists in November 2018, the pilot methodology and assessment questionnaire were elaborated and approved by the six beneficiary countries (Armenia, Azerbaijan, Belarus, Georgia, Moldova, Ukraine) at a subregional meeting in Minsk in March 2019, as well as by the Committee on Innovation, Competitiveness and Public Private Partnerships during its thirteenth session in March 2019.

74. In-country IPO coordination structures were set-up in all six beneficiary countries: national focal points were appointed, and high-level political support was communicated by all six countries.

75. The methodology and questionnaire were successfully tested in Georgia and subsequently adjusted in substance and practicability.

76. The IPO assessment was launched in all six beneficiary countries and questionnaire-based data collection processes have been implemented, through six government self-assessments and six UNECE-led independent assessments with the support of local, independent experts.

77. Innovation stakeholder consultation meetings took place in Armenia, Azerbaijan, Belarus, Georgia, and Ukraine to discuss preliminary findings, fill information gaps and discuss discrepancies between the government self-assessment and the independent assessment.

78. The delegation of Georgia highlighted the importance of the upcoming 4th industrial revolution, and technology commercialisation to ensure new knowledge is put into practice. The delegation would welcome the sharing of best practices with the local IPO implementation teams in the other countries. The delegation also commented on the catalytic effect of the IPO process in improving the understanding of innovation policy amongst Georgian innovation stakeholders and in enhancing inter-ministerial and inter-agency coordination.

79. Regarding preliminary findings, experts highlighted the importance of narrowing the gap between educational curricula and the skills demanded in the labour market, and weak transfer of technologies from science to industry.

80. The Chair highlighted the importance of assessing the availability and quality of the underlying data and statistics that are available for policy benchmarking exercises such as the IPO, including those carried out by other international organisations.

81. There was agreement on the accuracy and relevance of the preliminary IPO findings presented by the Secretariat. The Team welcomed the Innovation Policy Outlook's timeline, methodology, and publication outline.

D. Discussion on progress with the Innovation for Sustainable Development Review of Georgia

82. The Team of Specialists discussed progress with the Innovation for Sustainable Development Review of Georgia (ECE/CECI/ICP/2019/INF.4) following a presentation by the Secretariat.

83. Since the thirteenth session of the Committee on Innovation, Competitiveness and Public-Private Partnerships in March 2019, two interim missions were conducted to present the review process, agree on the role of beneficiaries and define the topics of the elective chapters. A fact-finding mission of ECE secretariat and international experts was conducted in November 2019.

84. The delegation of Georgia highlighted the usefulness of the Review process, and the importance of public procurement as a driver of innovation demand. The delegation briefed the Team on a new funding tool of matching grants offered to entrepreneurs creating innovative solutions.

85. The importance for innovation of entrepreneurship and of a vibrant eco-system was also emphasized.

86. The Team welcomed the progress made on the Innovation for Sustainable Development Review of Georgia and looked forward to receiving the results of this work.

E. Other work since the eleventh session

87. The secretariat briefed the Team of Specialists on the outcomes of the activities carried out since its eleventh session, which included:

Analytical work

(a) Launch, presentation, and discussion of the Innovation for Sustainable Development Review of Kyrgyzstan in Bishkek on 28 February 2019;

(b) The policy document “The Fourth Industrial Revolution – reshaping innovation policies for sustainable and inclusive growth” (ECE/CECI/2019/3), endorsed by the thirteenth session of the ECE Committee on Innovation, Competitiveness and Public-Private Partnerships;

(c) Contributions to the four nexus areas, in particular Smart, Sustainable Cities and the forthcoming flagship publication on this issue.;

Capacity building

(d) A regional capacity building workshop on “Promoting innovative high growth enterprises in Eastern Europe and the Caucasus” in Minsk, Belarus on 5-6 March 2019, organised in partnership with the Organisation for Economic Co-operation and Development, the State Committee on Science and Technology of the Republic of Belarus and the Belarus Academy of Public Administration;

(e) A regional training on “Innovation for sustainable development” organized jointly with UNCTAD in Geneva on 28 March 2019;

(f) A national capacity building on “Science, technology, innovation policy and risk: access to finance for innovative business – bottlenecks and challenges”, in Minsk, Belarus on 29 May 2019;

(g) A working meeting between UNECE, the State Service of Intellectual Property and Innovation under the Government (Kyrgyzpatent) and the Donor Coordination Council of Kyrgyzstan was held in Bishkek on 25 June 2019 to discuss follow up actions to implement recommendations of the UNECE Innovation for Sustainable Development Review of Kyrgyzstan. As follow up to this event, an Action Plan for policy reforms was developed, as well as advice on how to develop the innovation ecosystem in the country;

United Nations Special Programme for the Economies of Central Asia (SPECA)

(h) A Regional Workshop on “Innovation and Technology Applications for Sustainable Development” in Bishkek on 26-27 June 2019 was organised alongside the 11th session of the Working Group on Knowledge-based Development of the United Nations Special Programme for the Economies of Central Asia;

(i) The 11th session of the Working Group on Knowledge-Based Development of the United Nations Special Programme for the Economies of Central Asia organised with ESCAP in Bishkek, Kyrgyzstan on 27 June 2019;

(j) The SPECA Innovation Strategy for Sustainable Development was finalized by the SPECA Working Group on Knowledge-based Development and adopted by the SPECA Governing Council in November 2019;

(k) A study tour for SPECA countries “From ideas to applications: Sharing best practices in incubators, science parks and technology transfer” was held in Moscow, Russian Federation, 21-23 October 2019 in partnership with the Moscow State Institute for International Relations (MGIMO), Techpark “STROGINO” and the SKOLKOVO School of Management;

Other events and activities

(l) A roundtable on “The Growth We Want - Solutions for Sustained, Inclusive and Sustainable Economic Growth” at the Regional Forum on Sustainable Development for the ECE Region, in Geneva in March 2019;

(m) The session “Towards the Circular economy: Innovation Policy for Smart Cities” of the roundtable on “Regional and national solutions towards smart and sustainable cities and the impact of UNECE instruments” at the sixty-eighth session of the United Nations Economic Commission for Europe in Geneva on 9 April 2019;

(n) The side event on “The growth we want is sustainable: harnessing innovation for a circular economy for all” at the High-Level Political Forum on Sustainable Development in New York on 9 July 2019;

(o) Jointly with ESCAP, a regional workshop for SPECA countries on “Innovation and technology transfer: the role of intellectual property”, was held in Tashkent, Uzbekistan, on 30-31 October 2019;

(p) Formal review of the forthcoming 2020 edition of the OECD publication “SME Policy Index for Eastern Partnership Countries”, in particular the chapter on SME innovation;

(q) Participation in the 2019 Astana Economic Forum in a panel on innovation and the fourth industrial revolution.

88. The delegation of Belarus expressed their gratitude for the capacity building activities carried out following the Innovation for Sustainable Development Review of Belarus, which along with the IPO is considered by the State Committee on Science and Technology as a priority area for cooperation. The delegation also noted the high-level cooperation between Belarus and ECE, and that it would like to further deepen this cooperation in the future.

89. The Team took stock of the work undertaken and expressed its satisfaction as to the outcomes of the work carried out, which has effectively responded to the needs of countries, and particularly those with economies in transition, in accordance with its mandate.

V. Inter-sessional implementation plan for the remainder of 2019 and for 2020 (agenda item 4)

90. The secretariat informed the Team of Specialists of the main outcomes of the thirteenth session of the Committee on Innovation, Competitiveness and Public-Private Partnerships held in Geneva on 25-27 March 2019 and presented the draft implementation plan for the Team’s work for the remainder of 2019 and for 2020.

91. The delegation of Kazakhstan requested a second-round innovation for sustainable development review to monitor progress since the original innovation performance review carried out in 2012. The secretariat explained that national reviews require dedicated extrabudgetary funding, and that it was ready to work with Kazakhstan to raise such funding for a review in the near future.

92. The delegation also briefed the Team on policy reforms in Kazakhstan in response to the earlier ECE recommendations, including the creation of incubators and venture funds. A joint venture fund with Uzbekistan is under construction for 2020. There are also plans to create several sectoral incubators, and the delegation of Kazakhstan requested ECE advice and capacity building support based on the experience of peer countries. Kazakhstan also has agreed to share its own experience with Uzbekistan and offered to do the same with Kyrgyzstan.

93. The delegation of Kyrgyzstan requested ECE support in implementing the recommendations of the recent Innovation for Sustainable Development Review of Kyrgyzstan, particularly on a revised innovation law and on establishing a national innovation centre.

94. The delegation of Uzbekistan informed the Team of the increased interest of the country to participate in sub-regional and regional policy discussions, exchanges of experience and capacity building activities.

Implementation Plan for 2020

95. The Team of Specialists discussed proposals for work to be undertaken in 2020 in accordance with the Inter-sessional implementation plan for 2019-2020 of the Committee on Innovation, Competitiveness and Public-Private Partnerships (ECE/CECI/2019/2, Annex II) and, subject to Committee approval at the next meeting, for the rest of the year. The plan includes:

Analytical work

- (a) Finalisation, peer review, and official presentation of the Innovation for Sustainable Development Review of Georgia;
- (b) Launch of the research for a new Innovation for Sustainable Development Review of Moldova;
- (c) Finalisation, peer review, and official presentation of the pilot iteration of the sub-regional Innovation Policy Outlook;
- (d) The publication of a methodological guide on Innovation for Sustainable Development Reviews, prepared based on expert consultations with the Team of Specialists on Innovation and Competitiveness Policies;
- (e) A policy document on “Smart sustainable cities – the role governance and innovation policy” to be submitted for endorsement to the next session of the ECE Committee on Innovation, Competitiveness and Public-Private Partnerships on 23 – 25 March 2020;
- (f) A publication collecting the good practices in selected innovation policy areas developed by the Team in 2013-2019;

Capacity building

- (g) Within the framework of an agreed capacity building programme for Belarus to support reforms in line with the I4SD review of Belarus launched in 2017, a workshop on “Private-public venture capital funds for innovation projects – sharing international best practices” together with the State Committee on Science and Technology of the Republic of Belarus, in Minsk on 11 December 2019. This event will inform subsequent work to develop a roadmap for pilot initiatives in this area in Belarus;
- (h) Final capacity building event to discuss the draft of the roadmap for Belarus, May 2020;
- (i) Development and launch of a similar national capacity building programme for Georgia to follow up on the Innovation for Sustainable Development Review, with two events planned for 2020;
- (j) May 2020: Second sub-regional workshop on innovative, high-growth enterprises in co-operation with OECD;
- (k) Development of a policy handbook on this topic with OECD;
- (l) Subject to extrabudgetary funding, capacity building and policy advisory support for Kyrgyzstan on revising the innovation law and creating a national innovation centre;
- (m) Policy advice and capacity building support based on the experience of peer countries on sectoral incubators in Kazakhstan;
- (n) A regional training seminar on selected aspects of innovation policy organized jointly with UNCTAD and other interested UN agencies in the framework of the Inter-Agency Task Team on Science, Technology and Innovation for Sustainable Development in Belgrade in the first quarter of 2020;

United Nations Special Programme for the Economies of Central Asia (SPECA)

- (o) The 2020 session of the Working Group on Knowledge-Based Development of the UN Special Programme for the Economies of Central Asia (SPECA) will be organized together with UNESCAP;
- (p) A policy conference will be organised back-to-back with the session. The precise location and date remain to be decided;
- (q) Subject to extrabudgetary funding, a gap analysis will be developed as the first step in developing concrete action plans to support the implementation of the SPECA innovation strategy;

(r) Subject to extrabudgetary funding, develop a policy handbook in Russian on incubators and technology parks in SPECA countries;

Other events and activities

(s) A task force convened by the Team of Specialists on Innovation and Competitiveness Policies will develop draft high-level policy principles on selected aspects of innovation for sustainable development through a broad multi-stakeholder consultation process;

(t) Together with other ECE subprogrammes, develop a flagship publication on “Smart Sustainable Cities for All Ages”, with innovation as a cross-cutting theme and integrating the expertise of the Team of Specialists, as part of the Executive Secretary’s nexus initiative;

(u) Jointly with the Committee on Housing and Land Management, a workshop on “Innovative Financing and Evidence-based Policy-Making for Sustainable Urban Development in Belarus on 10 December. Potential further events led by the Committee on Housing and Land Management: Evidence-based Smart and Sustainable Cities (SSC) profiling, February 2020, Nur-Sultan; Presentation of SSC profile of Grodno, Belarus, 27-29 May 2020; Workshop on evidence-based SSC profiling at a date to be determined in Izmir, Turkey; and analytical contributions to a report on SSC indicators;

(v) Contribution to the 2020 Regional Forum on Sustainable Development.

96. The chair encouraged ECE member States and other stakeholders to provide extra-budgetary support (such as funds or in-kind contributions, including expert contributions and hosting events) to these activities.

97. The Team of Specialists agreed on the implementation plan for its work in 2020.

VI. Any other business (agenda item 5)

98. The secretariat updated the Team of Specialists on the UNECE “nexus” areas, particularly the “Nexus on smart and sustainable cities for all ages” and the preparations for the flagship publication by ECE on the topic of smart and sustainable cities as well as contributions to the other nexus areas. Delegates were invited to participate in the expert review group for this publication in 2020 and to contribute case study evidence.

99. In this regard, the representative of the University of Malaga invited the Team to present preliminary results at a Green Cities conference in April 2020.

100. The Team of Specialists decided that its thirteenth session will be held on 14 – 15 December 2020 in Geneva.

VII. Adoption of the Report of the session (agenda item 6)

101. The Team adopted the Report of the session.