ITEM 14: INTELLECTUAL PROPERTY AND INNOVATION: INCLUSIVE INNOVATION AND MSME COLLABORATION

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AGENDA ITEM 14: INTELLECTUAL PROPERTY AND INNOVATION: INCLUSIVE INNOVATION AND MSME COLLABORATION

14.1 Australia

350. Australia welcomes the opportunity to introduce the discussion on intellectual property, inclusive innovation and micro, small and medium sized enterprises (MSMEs). Australia acknowledges our fellow co-sponsors: the European Union, Switzerland, Japan, the United States and Chinese Taipei.

351. This overarching topic recognises the positive role MSMEs play in the global economy and the wider contributions they make to trade, growth, investment and competition; as well as social and economic development. As foreshadowed in document IP/C/W/622, it is proposed to consider three elements of this important topic, Inclusive Innovation and MSMEs, at each of the TRIPS Council Meetings to take place this year; firstly, MSME collaboration; secondly, MSME growth; and, thirdly, MSME trade. Australia extends an invitation to all Members to share national experiences, policies and practices under each of these themes, with a focus on intellectual property and innovation.

352. Australia is pleased to introduce the first theme: Innovation and MSME Collaboration, as set out in document IP/C/W/625 for discussion today. Australia acknowledges that MSME collaboration has many benefits for developed, developing and least developed countries. Through collaboration, MSMEs can share information, ideas and research and can establish themselves in global value chains. Collaboration models can take shape in many forms: from public-private and inter-firm partnerships, research and development opportunities, start up or accelerator hubs and entrepreneurial ventures.

353. Intellectual property rights play a key role in MSME collaboration. Intellectual property frameworks encourage creative endeavour, incentivise investment, and promote the sharing of ideas and knowledge. Australia has established a number of IP and innovation initiatives to encourage MSME collaboration. Australia will take the opportunity today to outline some of these initiatives.

354. National Innovation and Science Agenda – Global Connections Fund: Under the National Innovation and Science Agenda, Australia introduced the Global Connections Fund (GCF) to support SME collaboration. As part of the GCF’s Bridging Grants Programme, a researcher from the Royal Melbourne Institute of Technology University (RMIT), was awarded AUD50,000 to collaborate with an Indian research and biotech business to develop an eco-friendly solution to control powdery mildew and downy mildew, two diseases that devastate grapes in both countries. Both partners to this collaboration have created a framework under which intellectual property rights are shared. The expected outcome of the collaboration is a product that can be marketed globally.

355. National Innovation and Science Agenda – Global Innovation Linkages: Australia recently introduced the Global Innovation Linkages programme. It provides funding to assist Australian researchers and businesses, including SMEs, to collaborate with global partners on strategically focused, leading-edge research and development projects. It will advance Australia’s international collaboration and encourage Australian businesses, including SMEs, to leverage entrepreneurial expertise found in key locations overseas. Collaborations are encouraged in a range of economies including Brazil, United States, Singapore, Viet Nam, Israel, China, India, the EU and others.

356. National Innovation and Science Agenda – Landing Pads: At the November 2016 TRIPS Council meeting, Australia introduced the Landing Pads Program which is an initiative set up by the Australian Government to connect export ready Australian start-ups with access to some of world’s most renowned innovation and start up ecosystems in Berlin, San Francisco, Shanghai, Singapore and Tel Aviv. This Program has already produced some excellent results. For example, Event Workforce Group, a small, Australian-based technology start-up that develops apps to assist large businesses connect with talented staff members, has benefitted from the San Francisco Landing Pad. Through the collaboration established through the Landing Pad, Event Workforce Group has been able to develop its technology and services. Agreements relating to the protection
of intellectual property have fostered this successful collaboration. Event Workforce Group has recently signed a contract to assist staff the 2018 Super Bowl in Minnesota, and the 2017 Alpine Skiing World Cup in Aspen.

357. **IP Toolkit for Collaboration:** IP Australia has developed an IP Toolkit for Collaboration, designed to simplify the management of IP in collaborations between researchers and businesses, including SMEs. It provides collaborations with checklists of key matters to consider when establishing a partnership and includes template contracts, confidentiality agreements and term sheets, as well as guides on developing partnerships and advice on the management of IP. This toolkit is specifically designed to assist small and medium-sized businesses and researchers to develop and build effective collaborations. The Toolkit reduces the need for legal advice, freeing up resources to focus on building the partnership and attracting funding. A Mini IP-Toolkit is also available for lower value or less complex collaborations.

358. Today, I have provided some examples of Australian IP and innovation initiatives that have promoted MSME collaboration within Australia and abroad. We encourage other Members to join us in sharing national practices today and under future discussions on MSME Growth and MSME Trade.

### 14.2 United States

359. The United States welcomes this opportunity to share views and experiences on the important issue of inclusive innovation and MSME collaboration. I would also like to express thanks to Australia, the European Union, Japan, Switzerland, and Chinese Taipei for co-sponsoring this item.

360. This morning we will share our experiences in fostering inclusive innovation with a focus on MSME and explore several different ways that MSMEs contribute to the innovation ecosystem through collaborative efforts. In my remarks, I will describe the vibrant U.S. MSME landscape, demonstrate the critical role that intellectual property protection and enforcement play for MSMEs, highlight several U.S. policies and programmes that serve to help MSMEs make use of IPR systems and provide case study examples of innovative US MSMEs that depend upon US intellectual property policies.

361. I’d first like to share with you some data to paint a picture of the US small business landscape derived from the latest statistics from the Small Business Administration (SBA). According to the SBA’s data\(^1\), in 2013, there were 28.8 million small businesses in the United States which comprised 99.9% of all firms and employed 48% of private sector employees. These small businesses also represented 97.7% of exporting firms with 33.6% of known export value.

362. Small businesses have played a critical role in the development of the US technology sectors. In 2012, there were 244,243 small employer firms in high-tech industries, representing 98.5% of all employer firms in these industries. The Department of Commerce’s inaugural Annual Survey of Entrepreneurs released in 2016, which looked at the 5.4 million US firms with paid employees, revealed that "most firms had fewer than 10 employees (4.3 million, or 78.5 percent)"\(^2\).

363. In the United States, MSMEs play a critical role in driving inclusive innovation. They are engines for economic growth, employment and technological progress. This is particularly true for women and minority-owned businesses, where innovation has made critical contributions to economic empowerment, gender parity and social inclusion and equality.

364. I would now like to describe how intellectual property contributes to MSME development. For MSMEs, IPR protection and enforcement is not a luxury, but is an existential determinant for whether or not the firm can survive or fail. For example, trade secrets play a critical role in the development of MSME innovation and are among the primary forms of intellectual property that

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\(^1\) https://www.sba.gov/sites/default/files/advocacy/SB-FAQ-2016_WEB.pdf

MSMEs use to protect their innovations, as smaller firms “tend to have fewer resources and limited expertise and capacity for managing intellectual assets using formal IPRs”.

365. Patent protection also plays a critical role for the development of MSMEs in several notable ways. MSMEs, as compared to larger firms, may factor into their growth strategies, considerations such the marketing advantages that ensue from being able to claim patent protection. MSMEs also may use the presence of a patent to potentially boost their attractiveness to investors and increase their valuation.

366. Prudently registering and maintaining relevant trademarks can also help ensure that the firms’ investment in creating a distinctive brand will not be undermined by a competitor. Without this legal protection, an innovative MSME can miss out on the goodwill associated with a brand that has been made possible by an innovative creation.

367. Copyright protection also plays a key role in a large number of MSMEs, not only those engaged in content creation and distribution. In fact, copyrighted materials factor into MSMEs in all sectors by virtue of their importance in protecting websites, logos, brochures, advertisements, and jingles. Copyright licensing is a critical source of revenue for many MSMEs, that helps supports much needed jobs and capital for further growth and investment of creativity-powered entrepreneurs. From application developers, to the music community, and the film and TV industries, copyright helps fuel the MSME creative economy in developed, developing and least developed countries.

368. Recognizing both the important role that MSMEs play in the United States and the value that they derive from intellectual property, the United States Government has enacted policies and programs to promote MSME IPR protection.

369. Despite the relevance of one or more types of intellectual property to small businesses of all types and sectors, many MSMEs unfortunately lack an understanding of how to protect their intangible assets or register for IPR protection, when needed, and the processes for doing so. The US Patent and Trademark Office (PTO) and Department of Commerce International Trade Administration (DOC/ITA) play key roles in helping to educate MSMEs through extensive trainings and educational initiatives.

370. For example, ITA launched the STOPfakes.gov Road Shows - an innovative IPR outreach initiative that has reached over 1,000 SMEs to date. For these events, ITA’s Office of Intellectual Property Rights (OIPR) partners with USPTO and the US National IPR Coordination Center to increase SMEs’ awareness of IPR issues from both perspective: law enforcement and a trade.

371. ITA also maintains a website that broadcasts on-demand webinars and hosts other materials to help MSMEs and other business protect and enforce their IPRs. STOPfakes.gov was launched to serve as a one-stop shop for U.S. government tools and resources on IPR. The federal agencies behind STOPfakes.gov have developed a number of resources to educate and assist businesses, particularly MSMEs, as well as consumers, government officials, and the general public.

372. Moreover in 2015, DOC/ITA travelled to various US cities through the Start-up Global Initiative to help more start-up firms to think globally from the earliest stages. ITA participated in half day educational seminars in partnership with local incubators and accelerators to educate on protecting intellectual property among other things.

373. In September 2016, the US Customs and Border Protection (CBP) launched the “E-Commerce and Small Business Branch” to help educate small business importers on CBP compliance requirements. This initiative, along with CBP’s longstanding priority focus on IPR enforcement, helps protect US MSMEs and all firms against the harm caused by imports of infringing goods.

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4 Hughes, Alan; Mina, Andrea; The Impact of the Patent System on SMEs; A Report to the Strategic Advisory Board for Intellectual Property (SABIP); Pages 27-28.
5 World Intellectual Property Organization; How can Your SME Benefit From Copyright?
http://www.wipo.int/sme/en/ip_business/copyright/copyright.htm
374. CBP also provides information on how rights holders, including MSMEs, may utilize CBP enforcement tools, including by providing detailed information, product training sessions, and legal counsel.

375. The USPTO has several free or reduced fee programs to assist independent inventors and small businesses in securing patent protection for their inventions: the Patent Pro Bono Program, Pro Se Assistance Program, and Certified Law School Clinic Program.

376. Through the Patent Pro Bono Program, the USPTO partners with non-profit organizations and law schools to establish regional programs throughout the country. By working with their regional patent pro-bono program, under-resourced independent inventors and small businesses may secure free legal representation to help them file and prosecute patent applications.

377. PTO's Pro Se Assistance Program provides tools to assist MSMEs and others who file patent applications without the assistance of a registered patent attorney or agent. PTO's partnerships with laws schools also match law students to interested applicants—often MSMEs-- to help them draft and file patent and trademark applications. Finally, PTO's Global IP Academy (GIPA), which many in this room may have visited for bilateral meetings or programs in the past, also offers assistance tailored to MSMEs. In Fiscal Year 2015, GIPA provided training to 2,701 people associated with MSMEs.

378. The US Copyright Office also provides a variety of tools, including FAQs, podcasts, and reports, to help business better understand how to register a copyright and understand their rights.

379. Before concluding this intervention, I would like describe examples from the United States of inclusive innovation and MSME collaboration using examples of US MSMEs. At a macro level, an MSME's level of confidence in its ability to protect its intellectual property can fuel collaboration and spur new ideas, products, and innovation through these partnerships.

380. For example, if an MSME has confidence that its trade secrets can be protected through trade secrets laws, it may be more willing to rely upon non-disclosure agreements, non-competes, and other types of contracts that give it confidence to share this valuable information with others. Absent such protection, a company may not be willing to share its crown jewels outside of a family or close associates.

381. With respect to patents, an MSME with patent protection may find that it increases its valuation in the eyes of an investor; and, is, therefore, able to attract critical early stage capital infusions and enter into licensing agreements to bring their new ideas to market.

382. Moving to the micro level, one way to understand inclusive innovation and MSME collaboration is by looking at the diverse set of relationships and partnerships that comprise an innovation. For example, an inspired inventor or small team of researchers may envision a way to transform an existing, popular product of a larger company or industry by incorporating exciting technological innovation.

383. In the case of the founding team of Skydio, who originally met as graduate students at MIT, this has led to exciting advances in "intelligent navigation" technologies for unmanned aerial vehicles that provide quality cinematography and enable businesses with new ways to monitor the functioning of their infrastructure. The company has the goal of "making the power of flight a trusted and useful part of people's everyday lives". In this case, an enterprising set of innovators have identified a way to improve an existing idea that is marketed by a larger global manufacturer.

384. Another exciting type of innovation stands out for providing a standalone creative solution to longstanding challenges. A good example of this is from the products that have emerged from Ecovative Design, a growing firm that began as a collaborative class project between two classmates at Rensselaer Polytechnic Institute in New York, who discovered a novel way of producing biodegradable insulation using agricultural waste.

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6 https://www.skydio.com/blog/2016/01/series-a/
385. According to a story published about their origins, the professor of an Inventor’s Studio class they both attended saw promise in their discoveries and convinced them to take another semester of the class so that they could work on their idea and start a business. He even put them in touch with a patent attorney seeing early promise in the budding invention. In 2011, Ecovative announced that a group that included 3M, Rensselaer Polytechnic Institute, and DOEN Foundation had invested in the company to scale Ecovative's manufacturing operations and accelerate the development its polymeric materials.

386. Today, the company produces safe and sustainable biomaterials used in a variety of ways, including in furniture, an engineered wood alternative, and packaging materials using mycelium, which is the vegetative growth stage of fungi. Customers can even purchase Grow it Yourself Mushroom Material and create their own new applications of the technology. One of Ecovative's products, the Mushroom Packaging, has led to mutually-beneficial international connections. For example, a UK precision testing equipment manufacturer uses Ecovative's packaging material as a way to help meet its own sustainability goals.

387. In conclusion, I want to underscore the important role that intellectual property and IPR protection plays in fostering MSMEs growth in the United States. The US Government has recognized this linkage and developed policies, programs, and materials to help address the unique needs that MSMEs face in fully harnessing our IPR systems to help them protect their innovations, grow, and partner with others. As innovation seldom happens in isolation, the contributions of inventors, MSMEs, and their partnerships with established firms have played a critical role in collaborative innovation.

388. In surveying the landscape, it has been clear that while there may be needs and challenges specific to MSMEs in fully utilizing the IPR systems, the protections provided are relevant to firms large and small. The same incentives that continue to drive the growth of large, international firms, are also responsible for creating the opportunities that bring MSME inventions to market.

389. We look forward to continuing to engage in an active dialogue to find ways to further bring MSMEs into the global innovative ecosystem and look forward to hearing from other Members on this important topic today.

14.3 Chinese Taipei

390. This delegation is pleased to join Australia, EU, Japan, Switzerland and the United States in co-sponsoring this Agenda item. We are very pleased to have the opportunity of sharing our own experiences with fellow-Members, and of being able to learn from the best practices of other Members at the same time.

391. We fully identify ourselves with the observation made by the delegates of the United States and other co-sponsors, that IPRs help micro, small, and medium-sized enterprises (MSMEs) to channel the potentially boundless contributions of a wide array of innovators and creators in different economies. IPRs also enable MSMEs to spur innovation and creativity, to structure partnerships, and to join global value chains.

392. I would like to point out one of the priorities of my Government's industrial policy is to assist MSMEs, which account for nearly 98% of all local companies, to participate in domestic and international markets. To further develop a better environment for new business, we endeavour to build an ecosphere to provide for creation, innovation and start-ups. Thus, we are devoted to implementing programmes via the entrepreneurship consultation mechanism and MSMEs innovation incubation.

393. My Government launched the Entrepreneurship Consultation Service for potential entrepreneurs by means of free counselling service, single online portal, and international community linkage.

394. Meanwhile, the Entrepreneurship Incubation Education Programme offered education and training opportunities for start-up owners by organizing a series of training courses. It helps

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7 [http://www.newyorker.com/magazine/2013/05/20/form-and-fungus](http://www.newyorker.com/magazine/2013/05/20/form-and-fungus)
entrepreneurs enhance their competence and keep abreast with new trends and information on business management.

395. Secondly, the Entrepreneurship Dream Building Plan was launched to help MSMEs which set up for less than 5 years. In this plan, we provide layered counselling for start-ups, help them obtain professional certificates and government's support, hold exchange and matching activities, and offer the entrepreneurship awards to honour outstanding creative products, technologies, process or services of start-ups. This plan has successfully assisted 500 start-ups and created 3,000 jobs last year.

396. Thirdly, with respect to SMEs innovation incubation, we have set up several new incubation centres since 1997. These centres provide office space, equipment, R&D technology, resources of fund-raising, HR development, and opportunities to involve in international business. Around 100 incubatees from incubation centres have been listed on the stock market. My Government also introduced the Entrepreneur Work Visa to attract talented entrepreneurs from all over the world. The entrepreneurs from overseas are eligible for residence, if they meet certain requirements.

397. Fourthly, since 2013, the Emerging Industries Accelerator Program has been launched to establish international incubation cooperation platforms across Europe, America, Asia and the emerging market. The programme aims to facilitate global business portfolio by leading MSMEs to develop the local market. It also aims to encourage large enterprises’ contribution in intensified consultation to help MSMEs quickly incorporate into supply chains. We expect to increase the survival rate of MSMEs through this "large and small cooperation" and stimulate the speed of innovation for the traditional companies. Now, we focus on the six major fields of technology, which are: cloud computing, Internet of Things, biotechnology, green energy, digital content and precision machinery.

398. In terms of IP, the MSMEs face many different challenges when it comes to creating, protecting, circulating, and applying their intellectual properties. That is why the "IP SME Corner" of the Intellectual Property Office (TIPO) is the newest one-stop search and information platform that helps MSMEs to quickly access information on all the available and latest government resources.

399. In conclusion, we acknowledge MSMEs demonstrate the power and importance of inclusive innovation. MSMEs also play an essential role in diffusing economic growth and innovation throughout our societies, including their contributions to innovation and creativity, and their reliance on IPR protection. We believe that business start-up and incubation are the most important factors in the world striving for innovation and sustainable development.

400. We looks forward to hearing from other delegations about their existing policies in this regard and discussing topics which were proposed in document IP/C/W/62, which can offer the opportunity to demonstrate how IPRs can promote inclusive innovation through MSMEs.

14.4 Japan

401. Today, the delegation of Japan will share our experiences on MSME-university collaboration based on IP.8

Slide 1

402. There are various ways MSMEs can collaborate with other entities. Especially, MSMEs collaborating with universities have the potential to create new businesses and promote innovation. So, today, we would like to focus on IP-based Collaboration between MSMEs and Universities; and talk about some of our initiatives to improve such collaboration in Japan.

403. The left half of the first slide describes our 20-year history of initiatives, starting in 1995. It starts with the enactment of the "Basic Law for Science and Technology", which was designed to improve the collaboration between MSMEs and universities.

8 The representative of Japan made a PowerPoint presentation, available in Room Document RD/IP/16.
These initiatives were designed to advance and implement three key factors that promote collaboration, namely: "tech-transfer one-stop services" to give advice to and match researchers and companies; "IP management offices" to find seeds of technology and handle IP; and, funding such as venture capital that grows the seeds into goods and launches them into the market. The synergy of the three factors can promote IP-based collaboration, where technology is transferred in a "briefcase" called IP, in order to promote innovation.

**Slide 2**

405. A major method of collaboration between existing MSMEs and universities includes joint research and sponsored research.

406. Of the three key factors mentioned in the previous slide, the "tech-transfer one-stop service" and the "IP management office" mainly contribute to increased access to university technology. The figure on the left shows the increase in the number and amount of funding for joint research between universities and all private companies.

407. The figure on the right shows the number of joint research projects in green, and the number of sponsored research projects in red. From this figure, we can see that private companies, such as MSMEs favor joint research, which has increased approximately three times since 2001. One explanation for this might be that joint research allows MSMEs and other companies to learn how to carry forward research from their experiences with universities.

**Slide 3**

408. Another type of collaboration between MSMEs and universities is a start-up. In this slide, we would like to show you the recent developments and the current state of our university start-ups. The figure on the left indicates the number of new Japanese university start-ups each year. The figure on the right indicates the changes in the total number of Japanese start-ups in operation.

409. As you can see in the figures, there was a rapid increase in the number of university start-ups around 2000. But the rate has been slowing since 2006. According to a recent survey on start-ups, there seems to be a further need to support MSMEs in creating business, IP, and marketing plans; setting up exit strategies, and also finding foreign business partners.

**Slide 4**

410. The final slide shows our recent initiatives for further promoting collaboration between MSMEs and universities. In addition to the needs found in the survey, experience has taught us that many start-ups face difficulties, especially at the initial start-up phase and early growth stage. This is sometimes called the "Valley of Death" because no product has yet been developed to generate revenue, but the start-up begins running short of funding.

411. Thus, from both from the financial and management perspectives, we needed new venture capitals to complement existing ones in helping start-ups develop their technology and find products that sell well in the market. Considering this situation, Japan launched the "Public-Private Partnership Innovation Program" in 2013. In this program, four major national universities in Japan were granted funds to establish and invest in venture funds that could offer "hands-on" support, especially in the early stages of the start-ups' development. In addition to the Program, Japan also supports grass-root initiatives to promote MSME-university collaboration in local communities. We hope that these efforts will boost new MSME-university collaborations.

**14.5 European Union**

412. Intellectual Property Rights (IPRs) play a crucial role in: catalysing innovation and creativity; promoting economic growth and development; creating and growing jobs; improving the quality and enjoyment of our lives; and, combating the manifold challenges we face as individuals as nation and as a global community.

413. Among this multitude of positive contributions IPRs provide a critical conduit for inclusiveness in local and global trade. In particular, IPRs help micro, small and medium-sized enterprises (MSMEs) to channel the potentially boundless contributions of a wide array of innovations and creators in different economic sectors and from diverse communities. IPRs also enable MSMEs to spur innovation and creativity to structure partnerships and to join global value
change. The key role of intellectual property in the success of start-ups and innovative SMEs has been recognised. It allows innovative businesses to profit from the result of their creativity, inventiveness and R&D investments and creates an incentive for further investment in innovation.

414. Recent data from the EU Intellectual Property Office (EU IPO), show that businesses using IPRs perform better; and, that this is particularly true in the case of micro, small and medium-sized enterprises. MSMEs owning IPRs have almost 32% higher revenue per employee than MSMEs that do not. They also expand their workforce faster and pay higher salaries. IP is, therefore, essential for smart and sustainable growth. Given that knowledge-based parts of the economy in developing and developed countries with strong innovative performance is made up of business whose most valuable assets are intangible, innovative and creative start-ups and MSMEs need to be aware of the advantages of using IP and the dangers of neglecting it. To better assist MSME the European Commission set up the Executive Agency for Small and Medium-Sized Enterprises which manages the vast majority of the EU Programmes designed for MSMEs to help them innovate and do research.

415. The Commission announced in 2015, that it would come forward with EU level measures to support the use of IP by SMEs, in the framework of the Single Market Strategy. As delivery of that commitment, the Commission has put into place a package of IP support measures for start-ups and SMEs aiming to improve coordination and consistency in addressing sub-optimal use of IP by them across the EU.

416. This package was recently presented in a new communication utting intellectual property at the service of SMEs to foster innovation and growth and another communication entitled "Europe's Next Leaders: The Start-up and Scale-Up Initiative". The communication shows that the European Commission has now a coordinated approach across EU policies to be delivered through a set of pragmatic measures in order to boost innovation and research with the involvement of micro, small and medium-sized enterprises. The new measures include: the streamlining European IP Awareness Schemes for SMEs and providing a cooperation platform for EU Member States; developing an EU IP Mediation and Arbitration Network for SMEs; encouraging the creation of European-level insurance schemes for litigation and IP theft; building on a common IP valuation method; and, improving coordination of IP support funding schemes, including by means of a possible guidance to Member States and by developing monitoring methods for their impact.

417. Working in partnership with all levels of government, in EU Member States, regions and cities and all stakeholders, including start-ups and scale-ups themselves, is necessary for the efficient and successful implementation of initiatives intended to help SMEs and allow them to cooperate better. The EU and Member States are working on further simplifying the life of start-ups by supporting them in the following areas: connecting them with the right partners, i.e., investors, business partners, universities, research centres etc.; assessing commercial opportunities, especially procurement contracts; recruiting employees with the right skills including from outside the EU; and, in recent years, the European Commission and EU member States have supported the creation of communities to help start-ups connect with potential partners.

418. At EU-level, the "Europe's Next Leaders: The Start-up and Scale-Up Initiative" has emerged as a recognised brand for creating links between ecosystems, focusing on connecting people, international outreach and providing information, a one-stop shop for start-ups. "Europe's Next Leaders: The Start-up and Scale-Up Initiative" also helps SMEs through in particular match-making between investors, corporates and entrepreneurs as well as networking of regional decision-makers. "Europe's Next Leaders: The Start-up and Scale-Up Initiative" objectives are to reinforce the links between people, businesses and associations who build and scale-up the start-up ecosystem, linking them also to information on IP, but other measures are web-investor forums, the accelerator assembly and the crowd-funding network. These are meant to inspire entrepreneurs and provide role models for others to follow. They also celebrate a new and innovative start-ups, help them to expand their business and give them access to funding on the Horizon 2020 which is the main research and innovation framework programme of the EU.

419. The Web Investors Forum brings together the investors and accelerators from all over Europe with a goal to foster a more scale-up friendly ecosystem. The Web Investors Forum acts as an international channel of conversation for the European Investment Fund and European Commission with European and international investors. Specifically, the Web Investors Forum bridges investors to corporate development heads like the Start Up Europe Partnership (SEP),
European Matching Funds and the European Commission. In addition, the European Institute of Innovation and Technology (EIT) has set up a number of knowledge and innovation communities in the thematic areas of ICT, energy, climate change, health and raw materials with 25% of public financing, the rest being private investments.

420. The European Institute of Innovation and Technology is helping on a number of fronts, for example: on entrepreneurship skills, mentoring, start-up accelerators and information about IP. The EU has also established thematic smart specialization platforms, linking up regions and businesses and supporting the European Structural and Investment Fund (ESIF) for scale-ups promoted by regional networks and European strategic classic partnerships. Together with the targeted support they receive, these projects help create opportunities for scale-ups.

421. The European Commission has provided increased support to SMEs through the Horizon 2020 Research and Innovation Framework Programme, either as partners in collaborative projects with research organizations and other firms, or as single beneficiaries. It has also boosted support for innovation including through more demonstration projects, facilitated access to experimentation and pilot facilities, actions on innovative procurement and reinforced financial instruments. As a consequence, SME participation has increased and is currently above 20% of the target level. From 2018, the Horizon 2020 Research and Innovation Framework Programme will adopt a fully bottom-up approach, so innovative projects that cut across sectors and technologies become eligible for support, making it easier for start-ups to access financial and technical support, targeting market-creating breaks through innovations with a scale-up potential.

422. Another instrument is the European Cluster Collaboration Platform which is an online platform created by the European Commission providing information and network support for clusters aiming to improve and increase their competitiveness through transnational and international cooperation. The aim of the Platform is to facilitate cluster cooperation between organisations and members, i.e. companies, R&D institutions among others, not only by providing relevant information, but also by organising match-making missions across the EU focused on specific topics. This service facility aims to: provide cluster organisations with modern tools which allow to make efficient use of networking instruments; search and find potential partners and opportunities; develop collaboration transnationally within Europe and beyond and support the emergence of new value chains through cross-sectorial cooperation; access the latest quality information on cluster development; and, improve their performance and increase as well as their Members competitiveness.

423. To conclude, we would like to underline that transparent and predictable intellectual property rules assist MSMEs to engage confidently in international trade. Successful collaborations between entities often involve transfer, sharing and creation of knowledge, ideas or technology. Intellectual property rights provide a framework for the ownership, protection and use of ideas and information created through partnership in Europe and beyond.

14.6 Switzerland

424. Let me thank Australia for introducing this agenda item today, and the earlier delegations that introduced their presentations. Switzerland is pleased to co-sponsor agenda item 14 and to co-sponsor also the two Communications on the topic, in IP/C/W/622 and IP/C/W/625. The purpose of document IP/C/W/622 is to take a look ahead and to suggest topics in relation to IP innovation and MSMEs that the Council could discuss. That should give Members more time to prepare to look into their own national situations and gather information. We believe that MSMEs are a common denominator of all WTO Members and could allow a discussion as inclusive as possible.

425. My delegation welcomes the opportunity for Council Members to exchange such experiences and views on how cooperation among companies and companies’ interaction with public agencies may contribute to innovation and on the role IP protection can play in facilitating such collaborations. My delegation will illustrate its own national experience by presenting two case studies of private-private and private-public collaborative innovation ventures.

426. "Innovation is a team sport.” A corporate culture of cooperation is a prerequisite for a company to produce a sustainable innovation process. A culture of curiosity, the exchange of
ideas, asking challenging questions, and working on answers from different angles are key for innovation to happen in a company.

427. What is true about fostering a culture within a company is similarly true of collaboration between two or more separate entities. Let me illustrate the importance of cooperation in R&D with two practical case examples.

428. The first case concerns an electronic system called Flokk. The Flokk system provides new and interactive illumination solutions for designers and architects. It is the result of a multiple-player R&D-project that involved a Swiss University of Applied Science and three different companies who contributed their know-how, resources, and material at varying stages of the project.

429. The inventor of Flokk acted as the project’s driving force. To further develop and test his concept, he reached out to partners in the manufacturing sector. There, interest for his ideas proved to be high. A Swiss SME called iArt (45 employees) managing innovative projects for museums, international events, brands, architects and media artists, became the main partner for the further process engineering and the launch of the product. After establishing the project’s major guidelines and cornerstones, as well as clarifying all IP aspects, the two parties were able to get support from the Federal Commission for Technology and Innovation. Furthermore, the project got support and input from the Swiss SME Inventron and the international electronics manufacturer Philips. It was thanks to the interaction and collaborative effort between all those players that Flokk took many of the hurdles that need to be overcome from the stage of an idea to introducing an innovative product, which is commercially successful in the market.

430. Flokk luminaires can interact with each other, with their environment and with digital data to display information in the form of light effects, such as patterns of clouds for example. The Flokk technology makes also use of an algorithm to keep luminance in the room at a constant level. If one luminaire is dimmed, another will shine brighter. This allows for an even and pleasant lighting. Flokk’s technology attracted commercial attention from an early stage of its development and gained a design award in Switzerland in 2016.

431. The initiators of the project are currently moving ahead by transforming this technology into serially-produced consumer products. An important enabler in the Flokk technology was intellectual property. It brought the parties together with their different backgrounds, knowledge and experience. It helped manage their partnership. A contractual agreement on who would own which IP rights and how future commercial benefits would be shared, contributed to the well-functioning of the partnership, and therefore worked as an enabler for the successful project.

432. Our second example concerns an invention consisting of a technical solution that increases precision in robotic systems. Such systems are used and are often indispensable in scientific laboratories or in hospitals, where precision is key. The invention is called CASCAD. This innovative technology allows for example to prepare medical samples for analyses with a particularly high accuracy. Apart from scientific and medical applications, the technology also offers considerable potential in other field of technology, such as the semiconductor or the solar industry.

433. Like Flokk, CASCAD is the result of collaboration between private companies and a Swiss University of Applied Science. The initial project-idea came from two private companies. The University of Applied Science contributed technical input at the later stage of the project. Combining the expertise from different parties proved to be a success-story for the project. It is a perfect example of the potential benefits of R&D-collaboration.

434. Even in a political and economic environment conducive to innovation, novel ideas and innovative ventures include trial and error, success and failure. In case an innovation has the potential for a commercial success, the innovator should early pay attention to how to protect his or her innovation against illegitimate free riders. In many cases, this includes securing the relevant intellectual property rights in order to to secure a return on the investment made in the R&D process, to procure financing, reinvest in improving an existing innovation or innovate in a new field. If securing intellectual property rights is neglected or attempted too late, innovators risk

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losing their competitive advantage and loss of their assets. What could have been a commercial success may thus turn out to be an economic failure.

435. Nowadays, ideas and knowledge are no longer developed in the same place as where they are transformed into product innovations. The case examples presented are illustrative: in this respect: The Flokk illumination system was based on a researcher’s ideas which were eventually transformed with several players from the private sector into a commercially viable product. In the case of the CASCAD robotic system, the idea originated in a private company and was then developed and pushed towards market introduction also thanks to the input from another company and from institutions, both private and public, proficient in basic and applied research and product development.

436. R&D cooperation can be particularly useful for SMEs to diversify risks, share R&D costs, and tap financial resources and specific knowledge. Additionally, SMEs can generate new revenue streams by licensing out their IP.

437. At the same time, SMEs often fear that their specific know-how could be misappropriated or be unintentionally revealed through innovation collaborations. Therefore, an early and well thought through IP strategy addressing these concerns and challenges becomes important to support innovation collaboration.

438. The government, providing the legal framework, has an important role to play here. With reliable IPR protection in place and efficient enforcement in the case of IPR infringement available, companies will more readily engage in innovation collaborations and thereby contribute to the growth and competitiveness of a national economy.

439. "Innovation is a team sport", as I mentioned earlier. As in any team sport, rules are needed so the players now what their task is in the game and how they should interact with the other players, what is fair and what is foul play and what they need to accomplish to become a successful team. In the field of collaborative innovation, intellectual property is one chapter of the rulebook that MSMEs should read carefully.

14.7 India

440. My delegation would like to thank the delegations of Australia, the European Union, Japan, Switzerland, the United States and Chinese Taipei for tabling an agenda item on "IP and Innovation: Inclusive Innovation and MSME Collaboration ". The submission by Co-sponsors refers to "inclusive innovation". The term is not defined. It would be important for a common understanding to clarify what is meant by use of this term.

441. In para 5 of the document (IP/C/W/622), the co-sponsors have selectively quoted from the study about the Informal Economy, Innovation and Intellectual Property, by de Beer, Fu & Wunsch-Vincent (2013, page 39) to support their position that IP must be considered as a relevant aspect for innovative micro-sized enterprises. However, the important observation by de Beer, Fu & Wunsch-Vincent in their study is that formal IP-based exclusions and proprietary knowledge are not compatible with the knowledge diffusion and learning processes of the informal economy which are based on communities, clusters and the exchange of information.

442. I quote from same page 39 of the study

"the absence of formal appropriation and the work in clusters make up the strengths of the Informal Economy(IE)’s innovation system. In this view, the innovation system in the IE largely rests on "collective learning experiences” based on low entry barriers and free flows of knowledge. The dynamics among similar enterprises in collective geospatial clusters determine rates of innovation, economic successes and the value of the cluster. Individual firms or economic units are not the key determinants of innovation and efficiency.

Appropriation efforts must also be considered in light of the social systems -- specifically family structures, community networks and commercial clusters -- within which the Informal Economy operates. Knowledge flows are characterized by trust, reputation, reliability, social
and cultural signalling, and the willingness to pool resources and collaborate. This facilitates access to information, and critically reduces transaction costs.

Clearly, in this context, the notion of formal appropriation of ideas can be considered alien and inadequate in this Informal Economy context. As one study suggests, actors believe that formal IP based on exclusions and proprietary knowledge is not compatible with the knowledge diffusion and learning processes of the Informal Economy which are based on communities, clusters and the exchange of information."

443. The co-sponsors of the agenda item on "IP and Innovation" have argued that increasing patent monopolies would drive greater innovation. However, the evidence does not support this assertion. On the contrary, the view gaining ground is that increasing patent monopolies would actually stifle innovation.

444. Joseph Stiglitz, the Nobel laureate, in his 2016 paper on "Industrial Policy, Learning, and Development", questioned the benefits of IP and stated that IPRs, especially if poorly designed, can impede innovation and learning.

"There are significant static costs of intellectual property. It impedes the use of information and gives rise to monopoly power. Increasingly, the alleged dynamic benefits have come to be questioned. IPR, especially if poorly designed, can impede innovation and learning. Knowledge is the most important ingredient to production of knowledge, and IPR reduces access to knowledge. Moreover, the patent system intervenes with the open system that is essential for the advancement of science. In addition, the patent thicket and patent trolls have provided further impediments to research. The patent system even distorts the pattern of research, encouraging more research directed at extending market power.

These adverse effects are especially significant for developing countries. Successful development entails closing the knowledge gap and necessitating access to knowledge. It is even more important in areas of health—access to life saving medicines has implications that go beyond the budget."

445. Intellectual Property is only one element in a larger innovation ecosystem and IP laws alone do not promote technology development. According to the Trilateral study by WTO, WHO and WIPO on "Promoting Access to Medical Technologies and Innovation: Intersections between public health, intellectual property and trade (2013)", Page 126,

"Patent law is not a stand-alone innovation system. It is only one element of the innovation process, and one which can be deployed differently in diverse innovation scenarios. Patent law has little bearing on many other factors that lead to the successful development of technologies, e.g. the nature and extent of demand, commercial advantages gained by marketing and ancillary services and support, commercial and technical viability of production processes, and compliance with regulatory requirements, including through effective management of clinical trials data."

446. India declared the decade of 2011-2020 as the Decade of Innovation. The spirit of innovation has to permeate all sectors of economy from universities, business and government to people at all levels.

447. The MSME sector in India consists of 36 million units and provides employment to over 80 million persons. The sector, through more than 6,000 products, contributes about 8% to GDP, besides 45% to the total manufacturing output and 40% to the exports from the country. The MSME sector has the potential to spread industrial growth across the country and can be a major partner in the process of inclusive growth.

448. To enhance awareness of MSMEs about Intellectual Property Rights (IPRs), the Government of India launched a scheme titled "Building Awareness on Intellectual Property Rights (IPR)" for the MSMEs, in August 2008. The scheme enhances awareness of MSMEs about IPRs to take measures for protecting their ideas and business strategies, which would also assist them in technology upgradation and enhancing competitiveness.
A national innovation survey had been conducted during 2011-12, in India, by the Department of Science and Technology (DST), of the Government of India. A national report entitled "Understanding Innovation: Indian National Innovation Survey" with special focus on MSMEs has been brought out by DST. The report is based on the analysis of sample survey of 9001 firms, largely MSMEs, spread across 26 states and five Union Territories across various industrial sectors in the country.

The survey identified many barriers to innovation with regard to MSMEs. Some important barriers to innovation include availability of finance and in general the cost of innovation, availability of skilled manpower, access to market information and availability of information technology, infrastructure, domination of established player in the market, regulatory requirements etc. IPR-related issues are not found to be of any concern for the innovation activities of the firms.

I conclude by quoting from our Prime Minister Narendra Modi’s statement during the launch of the Mission Innovation in Paris in November 2015.

"Our innovation initiative should be driven by public purpose, not just market incentives, including on intellectual property. That also means strong public commitment by suppliers to developing countries. ... Innovation must be backed by means to make it affordable and ensure adoption."

Colombia

We would like to thank those who have presented this document, which seems to establish the link between intellectual property and innovation and the relation with MSMEs. Colombia recognises intellectual property as one of the priorities for supporting the generation of companies. For this reason, the National Government, in February 2012, established the Business Growth Management Unit which seeks to promote entrepreneurship, innovation and productivity as pillars for business development and competitiveness in the country. This entity also includes among its lines of action, skills training for companies to use tools to protect their innovative developments and innovations working together with the Ministry of Trade, Industry and Tourism and the Observatory for Science, Technology and Innovation.

Under the National Strategy to Promote Investment Protection, which seeks to promote a culture of industrial property in regions of the country where there are low levels of patent applications. One of the main outcomes of this Initiative was the launch of two meetings, one in December 2016 and one in February 2017, seeking to provide technical and financial support for the registration of MSMEs to develop innovations that are patentable. These companies reached the necessary technical level to submit several patent applications to the competent authority. This is a continuous effort, and we hope that we can continue to strengthen the programme given its positive impact on the development of these regions.

Canada

Canada is pleased to present some of its national experiences on MSME collaboration, as part of the broader discussion on "Inclusive innovation and MSME collaboration". We would like to thank the co-sponsors for their Communications on this issue, as well as the delegations that have provided insights on their national experiences and practices so far.

One of the key challenges facing MSMEs is that innovation is constrained by the availability of resources for research and development (R&D). Indeed, a key irony for small businesses is that, while the fastest way to boost productivity and economic growth is often innovation, the resources available for R&D are also tied to a firm’s size. In Canada, for instance, MSMEs make up the largest proportion of Canadian firms (and similar to the proportions reported by a few other delegations, this accounts for roughly 97% of domestic firms). Individualy however, MSMEs account for proportionally less R&D spending than large businesses. Collaboration between MSMEs, as well as with other types of firms, educational and other institutions, can therefore play a crucial role in supporting innovation in a competitive global economy. For MSMEs, global collaboration has become a competitive necessity. Indeed, as global trade becomes increasingly organized along global and regional value chains, innovation is also correspondingly designed around research
networks and clusters, enabling MSMEs to enter into cross-border research arrangements and seek new market access opportunities.

456. In view of the economic constraints faced by MSMEs in innovating, growing and seeking new markets, the Government of Canada has undertaken a range of initiatives and programs aimed at facilitating their collaboration. For instance, Canada’s Trade Commissioner Service (TCS) and the National Research Council Industrial Research Assistance Program (NRC-IRAP) manage several bilateral programs aimed at fostering collaboration between small Canadian businesses in partnership with foreign market players. For instance, the Trade Commissioner Service Going Global Innovation program supports Canadian researchers from SMEs, universities and non-governmental research centres aiming to commercialize technology through collaborative R&D partnerships in foreign markets. This program provides financial assistance to Canadian researchers, including for international travel, legal fees to support formalized partnerships, and other costs related to international collaboration.

457. Similarly, the Canadian International Innovation Program (CIIP), managed by the TCS and NRC-IRAP, is a bilateral funding program that fosters collaborative R&D projects for the commercialization of research between researchers in Canada and partners in Brazil, China, India, and Korea, as well as with Israel through the Canada-Israel Industrial Research and Development Foundation. For instance, in March 2016, the CIIP launched a request for proposals from Canadian SMEs and innovators in India on collaborative R&D projects. This collaboration, undertaken in partnership with India’s Global Innovation Technology Alliance, will provide R&D funding in priority areas such as: clean and green technology; energy efficiency; affordable healthcare; information and communications technologies (ICTs); electronic system design and manufacturing; advanced manufacturing; and, water technology.

458. More recently, in September 2016, the NRC-IRAP and Germany’s Ministry for Economic Affairs and Energy signed a declaration of intent to stimulate and fund innovation-driven collaboration among German and Canadian SMEs. The arrangement will foster collaborative scientific and industrial R&D projects aimed at accelerating the development of new technologies with high potential for commercialization. In the fall of 2016, a call for proposals was launched in which eligible SMEs may receive funding through Canada’s NRC-IRAP, as well as through Germany’s Central Innovation Programmes for SMEs.

459. Canada has also developed formal science and technology relationships and partnerships with established and emerging innovation networks around the world. For instance, Canada has developed a framework for international collaboration through science and technology (S&T) agreements with a number of bilateral partners, including in the Asia-Pacific, Europe, Latin America and the Caribbean. These S&T agreements serve as guidelines for Canadians to effectively work with partner countries to increase international science and technology capacity. A related initiative, the Canadian Technology Accelerator (CTA) provides high-growth, market-ready Canadian companies support to access global markets and entrepreneurship services within the ICT, life sciences, and clean technologies. Managed by the TCS, the CTA provides support for Canadian technology SMEs to access global market opportunities in nine cities, including key ICT, life sciences, and clean technology markets in the United States.

460. Canada is also an associate country of EUREKA, an international network for market-driven industrial R&D. EUREKA includes over 40 economies from the EU, Europe, Israel, and Korea, and serves as an international network to coordinate national funding sources between international project partners, to accelerate innovation in new technologies, products and services for commercialization. Since joining EUREKA in 2012, Canada’s associate membership has provided close to 50 Canadian innovators, most of which are SMEs, with the opportunity to pursue projects with international partners with a combined value of over CAD$50 million (or approximately USD$38 million). As well, as part of this program, participants retain complete IP ownership and negotiate IP arrangements amongst themselves on a project-by-project basis.

461. With respect to collaboration among MSMEs relating to IP more specifically, the Government of Canada’s framework laws on IP are designed for general applicability to all businesses, while also being mindful of not creating barriers to MSMEs. For instance, the Canadian Intellectual Property Office (CIPO) provides IP frameworks and innovation programmes that assist MSMEs to build and maintain collaborations. In particular, CIPO provides online guidance for businesses on licensing or assigning part or all of a business’ IP rights to third party collaborators or purchasers;
business intelligence on how to use IP data to learn about innovations in a particular field, including with respect to potential partnerships, competitors, and changes in market conditions; and financing resources for IP. CIPO is also modernizing its services to help businesses in Canada better access the Canadian IP system and leverage their IP rights for collaborative purposes, including through licensing and other arrangements. Furthermore, Canada’s efforts to align with international IP standards and filing systems creates an environment that facilitates global MSME collaboration, for instance, by harmonizing filing procedures available to businesses collaborating in networks across jurisdictions.

462. Once again, Canada would like to thank the co-sponsors for proposing this topic for discussion. Given the role that collaborative arrangements play in innovation, not only nationally but also in the form of regional research networks and international partnerships across jurisdictions, we remain very interested in hearing about the experiences and practices of other delegations. Canada will also be pleased to continue discussions on topics of "MSME growth" and "MSME trade" at upcoming meetings of the TRIPS Council, and looks forward to sharing more of its experiences on these issues.

14.10 Argentina

463. Argentina thanks Australia, Chinese Taipei, the European Union, Japan, Switzerland and the United States for the proposal contained in documents IP/C/W/622 and 625 on "Inclusive Innovation and MSME Collaboration" and for their presentations.

464. We view this proposal with great interest. In Argentina, as in other countries, MSMEs play a key role in the economy by reason of their contribution to GDP, employment and economic development. In addition, they possess enormous innovative capacity. Intellectual property rights are an important aspect of innovation. Patents, trademarks, industrial designs, copyright and utility models are tools that can be used to protect innovation.

465. Argentina’s domestic production plan focuses on MSMEs and helps to protect their development through trademarks, industrial designs or patents. We await with interest the exchange of experience regarding the three aspects of innovation cited by the co-sponsors (collaboration, growth and trade) and their relationship to MSMEs.

14.11 Guatemala

466. We thank the delegations that have proposed this agenda item, as it underlines the importance of the link between the intellectual property system in innovative agencies and enterprises.

467. Guatemala points out that, in its National Intellectual Property Strategy, intellectual property has emerged as a key tool for countries' innovation, transfer of technology and competitiveness, as it has resulted in creations and knowledge that become intangible wealth-generating assets of commercial value. A good intellectual property system strikes a balance between the interests of the right holder and the general interest, encouraging creation and innovation and facilitating economic and social development.

468. Currently, the ability to compete on a global scale conditions a country’s prosperity; to be able to compete at the international level, a country’s economic actors need to stand out and to do so they must incorporate the intangible assets aspect into their business strategies, particularly intellectual property.

469. Intellectual property does not only enhance the value of companies but also of the economy as a whole. In the knowledge economy in which we live, the bases of competitive advantage lie in the processes and characteristics that make products or services unique. Innovation is essential in achieving this differentiation or value added, meaning innovation in the broad sense, not only as regards technology but also the product of business models, procedures, market positions or other elements which make something unique or different.

470. A broader vision of innovation can help a country to attract more resources. A vision which can be applied in the following sectors:
471. Together with the foregoing, innovative capacity will depend on an interrelated ensemble of investment, business policies and allocation of resources to support innovation that is "new for the world". The following are needed to achieve this:

- promotion of all types of innovation;
- education to improve creativity and entrepreneurship;
- fostering the mobility of researchers;
- greater exploitation of the domestic market;
- particular attention to be paid to the services sector which offers under-exploited opportunities, notably through synergy with the industrial sector;
- standardization and guarantee of quality;
- international bilateral and multilateral cooperation;
- promotion of groups or clusters from which knowledge reaches the market more rapidly;
- increased productivity;
- attracting investment;
- promoting research;
- strengthening the entrepreneurial basis.
- developing special products or services and capacities.

472. On this basis, as part of its 2016/2021 Economic Policy, the Government of Guatemala has established support for MSMEs as a strategic focus in order to enable and promote action for productivity, competitiveness and internationalization, determining the use of intellectual property systems as one of the tools to achieve this.

14.12 Mexico

473. We are pleased to be able to contribute to this agenda item of the TRIPS Council. The public policy of the Government of Mexico considers the use of intellectual property to be a key factor in the development of small and medium-sized enterprises, particularly for start-ups, whose business model is dependent on innovation. Intellectual property in a start-up is, therefore, a critical factor in protecting the company's intangible assets.

474. The importance of intellectual property also extends to socially-oriented businesses, which, with intellectual property protection, can make profits in a shorter period of time. We will accordingly go on to briefly illustrate the cooperation of the Mexican Industrial Property Institute in the Entrepreneur Support Network (Red de Apoyo al Emprendedor) programme, which is implemented by the National Entrepreneurship Institute (INADEM), the Mexican Government agency specializing in small and medium-sized businesses.

475. Through the Entrepreneur Support Network, users have access to an Internet portal, whose main purpose is to ensure that anyone with a good business idea has access to the support they need to enter the market.
476. In the case of the Mexican Industrial Property Institute, cooperation via the portal involves offering advice and support to entrepreneurs in obtaining intellectual property rights, as well as providing general information on the subject and raising awareness of its benefits.

477. Between July 2014 and August 2016, advice was provided to 9,823 entrepreneurs via the Network, which the Mexican Industrial Property Institute also used to actively participate in various national events, including the National Entrepreneurship Week (Semana Nacional del Emprendedor) and the National Entrepreneurship Award (Premio Nacional del Emprendedor), designed to encourage and promote innovation among entrepreneurs, particularly among micro, small and medium-sized businesses.

478. Additionally, every year the Mexican Industrial Property Institute holds the "Jornadas Expo Ingenio", which are mobile events with discussion panels, workshops and personalized advice aiming to bring together those who create and promote industrial property with industrial property users and applicants. Participants in these events include representatives of the intellectual property ecosystem, entrepreneurs as well as micro, small and medium-sized businesses.

479. Last but not least, in the framework of international forums, particularly in the Intellectual Property Rights Experts Group (IPEG) of the Asia-Pacific Economic Cooperation forum (APEC), the Mexican Industrial Property Institute has advanced initiatives in the field to support entrepreneurs and micro, small and medium-sized businesses.

480. Within the IPEG, Mexico was part of a joint initiative which also involved Korea, Russia and the Philippines, in which the countries joined forces and discussed actions to assess and strengthen the industrial property-related capacities of SMEs.

481. In 2016, the IPEG approved an intellectual property project submitted by Mexico, called "SMEs Innovation: Capacity Building on IP Strategy". One of the objectives is to create links between SMEs and the academic and scientific sector, so that entrepreneurs become focused on constant innovation and researchers acquire a business-oriented outlook to place their inventions on the market. The event will last two days in Mexico City and will take place in September 2017.

14.13 Israel

482. When talking about Israel, we have to talk about innovation, technology and start-ups. As many of you probably know, Israel is a start-up nation. We refer to start-ups, because in Israel the term is widely used and recognized. Although the term may be broader than the term micro, small and medium-sized enterprises or MSMEs, we believe that the term encapsulates many of the so-called MSMEs. Defining a start-up is more difficult than it seems, but there are a common few traits: solutions, innovations and lack of resources. These are traits shared by MSMEs. It is true that some start-ups graduate to the next level, but it is also true that the bulk of them remain as MSMEs.

483. In 1993, a Government initiative aimed to increase the number of companies using Israel Inventor funds. As a result of this effort, Israel's annual venture capital outlays rose nearly 60-fold, from 58 million to 3.3 billion, in the first ten years, and the growth tendency continues. The number of companies launched using Israeli venture funds rose from 100 to 800. Israel's information technology revenue rose from 1.6 billion to 12.5 billion. With a population of 8.5 million people, Israel has over 6,000 start-ups, and attracts more venture capital per person than any other country in the world.

484. The Israeli start-up scene extends from the tech hub of Tel Aviv to Jerusalem, and all the way to the southern district city of Beersheba. In Israel the start-up scene is a way of life and innovation permeates our society and culture. This is reflected in Israel's R&D expenditure as a percentage of the GDP which in 2014 was the highest within OECD members at 4.2% of GDP, while the average at OECD stands at 2.4%.

485. This all leads to a highly innovative country which was ranked fifth place, according to Bloomberg's Innovation Index in 2015. In Israel, we have had many programmes and policies to foster this innovation environment, but one of the ones worth highlighting are those under the Israel Innovation Authority. The Israel Innovation Authority, formally known as the Office of the
Chief Scientists of the Ministry of Economy, is responsible for the country's innovation policy and is an independent and impartial public entity that cooperates for the benefit of the Israeli innovation ecosystem and the Israeli economy as a whole. Its role is to nurture and develop Israel innovation resources, while creating and strengthening the infrastructure and framework needed to support the entire knowledge industry.

486. For the benefit of entrepreneurs and stakeholders in the high-tech industry, the Israeli Innovation Authority has set up a vast array of active innovation divisions that concentrate on providing optimal solutions to a variety of changing needs. One of these divisions is the Start-Up Division, which offers unique tools to support the early development stages of technological initiatives. These tools assist entrepreneurs in the start-up companies in developing their innovative technological concepts at the planning or initial R&D stages. Transforming ideas into reality can reach significant fundable milestones. The Start-Up Division incentive programmes are designed for the following target audiences: entrepreneurs with an innovative technological idea, and early stage start-up companies.

487. Another programme worth highlighting is known as "Tnufa Incentive Programme", which is designed for fledgling entrepreneurs who are interested in formulating and validating an innovative technological concept and in reaching the R&D stage, where they can raise funding for further development and commercialisation. The main objective of this programme is to assist the project in building an initial prototype, intellectual protection and initial business development.

488. Although Israel focuses heavily on technology, non-technology and innovations can benefit from some of these programmes as well. This is just a very brief description of some policies Israel aims at fostering innovation in MSMEs which as I mentioned before share many traits with what we call in Israel start-ups.

14.14 Dominican Republic

489. We would like to thank the proponents for including this item on the agenda of this Council meeting and we would like to share with Members the experience of the Dominican Republic in the area of intellectual property and innovation: inclusive innovation and collaboration with SMEs.

490. In The National Intellectual Property Strategy of the Dominican Republic, innovation has been established as a priority, and it is through the National Office of Industrial Property that a priority plan was launched for the promotion of invention and the use of a patent database as a tool which does give added economic value to national production.

491. In the course of the last two years our country has already witnessed the changes of this new focus which has led to a boosting of technological innovation. We also must highlight the excellent results of the first Appropriate Technology Competition which was carried out in the Dominican Republic in 2016, and thanks to motivation of our country, in the first trimester of 2017 four nations of the Central American sub-region will carry out competitions that promote innovation and emphasize the role of the innovator in problem-solving and wealth creation. The competition is sponsored by the Korean Invention Promotion Association (KIPA), the Korea Intellectual Property Office (KIPO) and the World Intellectual Property Organization (WIPO). It is in this way that the Dominican Republic carried out the Appropriate Technology Competition, entitled "Innovative Solutions for Everyday Life". Appropriate technology is designed with particular attention given to environmental, ethical, cultural, social and economic aspects of the targeted community. Given these considerations, appropriate technology comes from the local environment and normally requires fewer resources, it is easier to maintain such technology and is less costly and has a lesser impact on the environment as compared to other equivalent technologies, they do also generate innovate solutions and completely aimed at resolving local problems.

492. One of the aims of the competition is to raise awareness of the use of patent databases and the importance for Dominicans to become more familiar with seeking of solutions which already exist and adapting them to the socio-economic reality of the country. For the promotion of the competition, 30 nationwide local workshops were organized, along with advertisement in the national media, resulting in 56 participants presenting 83 innovative projects. From those projects, 10 were selected as finalists according to the terms established by WIPO and KIPO, and later 3 were selected as winners. The competition was a success and it did achieve the result, that is, to
use information of patents to generate Appropriate Technology, providing solutions to everyday problems in a community. With this type of initiative the Dominican Republic aims at fomenting invention in the new generations and to promote the industrial property rights system. We would like here to quote a few examples:

493. The programme "Formalize Yourself" which is a legal formalization programme for enterprises, increased by 82% in 2015 with a total of 1,215 of trade names registrations granted by 15 December 2016.

494. In the area of innovation, The Centre for Support to Technology and Innovation (CATI) was created by the National Office of Industrial Property of the Dominican Republic, on an initiative of WIPO with the purpose of facilitating access to information on industrial property for innovators and researchers, entrepreneurs, universities, SMEs in the country through information technology services, distinctive signs and other related high quality services. The CATI of Dominican Republic was set up in 2011 and since then different activities have been carried out so as to promote the use of patent information and public domain. It has the following objectives: advice to inventors, researchers, students and the general public on industrial property and particularly on patents; search for technological information to know prior art for a given product or an invented procedure; advice on the presentation of applications for patents or industrial designs, forms, drafting of documents, fees, terms, international applications and support to meet the different requirements, both on a formal and substantial examination; approach universities and research centres so as to disseminate the objectives of CATI and promote the setting up of local CATI, along with SMEs, industries and clusters, with the objective to promote the services of CATI; and train the focal points of universities and research centres through on-line and classroom classes.

495. Other initiatives that we have successfully carried out in our country is the Innovator Summer Camp. This came as a solution to respond to the need to train innovators and motivate teenagers to choose STEM careers (Science, Technology, Engineering and Mathematics). The methodology of this camp is based both on theory and practice. Over a period of 4 weeks in July, 50 meritorious students are chosen specifically with a high level of knowledge in the natural sciences and mathematics, from the third grade of the middle school both in public and private schools in the four mentioned areas. The idea is always to focus searches on the basis of patent databases which then can be applied at the end of the summer as a prototype or oral project.

496. Training is provided to SMEs in creation of trademarks for which we have trained 153 SMEs at national level. Workshops have been organized on trademark and packaging so as to strengthen the export capacity of national MSMEs.

497. Finally different cycles of talks have been organized on "Industrial Property and Development of Fashion Trademarks" by the Dominican Republic Institute of Fashion (INMODA RD) with the objective to increase the training culture in fashion in the country.

14.15 Russian Federation

498. We would like to thank Australia, the European Union, Japan, Switzerland, the United States and Chinese Taipei for their initiative and the tabled documents. We are glad to share today the Russian experience relevant to fostering collaboration and innovation among MSMEs.

499. In order to increase MSME’s inclusion in innovation the Government of the Russian Federation created a non-profit Assistance Fund for Innovation, which provides help to small enterprises in R&D domain. The Fund is represented in more than 70 regions of the country. Its main activities cover the following:

- enhancement of inclusiveness of young population in innovation activities,
- support of start-ups,
- support of commercialization of R&D results,
- development of hi-tech sectors of economy.

500. One of the regional offices is located in the Academic City of Novosibirsk, which is a complex with a unique technological infrastructure, creating extremely favourable environment for
innovative activities by MSMEs. Its experience of inspiring collaboration between its residents has been recognized as one of the most effective among all Russian technological clusters. Academic City focuses its activities in four directions:

- information technologies,
- instrument engineering,
- nanotechnology
- biotechnology.

501. The Academic City provides special infrastructure for each of these activities. In particular, specialized business-incubators help young companies by providing cheaper facilities, equipment and access to laboratories.

502. This project became a leader in the number of participants, created work places and volumes of return of its participants, among 12 technological clusters created in Russia. Moreover, it became highly commercialized with the share of state investment amounting to only 21% of all investments attracted to the Academic City.

503. International collaboration is enhanced by its membership in the European Business and Innovation Centre Network, as well as in the International Association of Science Parks and Areas of Innovation.

504. We thank the Membership for their attention and hope that our short presentation has provided certain understanding of the Russian experience in creating favourable environment for fostering MSMEs collaboration and innovation.

14.16 Brazil

505. We thank the delegations of Australia, EU, Japan, United States and Switzerland for the documents circulated for this session. The interrelation between intellectual property and innovation is a topic of interest to our delegation, since the encouragement of innovation and knowledge is one of the major justifications for the intellectual property system. The TRIPS Council, by addressing these issues in a coherent way, could provide valuable contributions to the design of effective national innovation policies.

506. The document IP/C/W/625 continues to be analyzed by relevant Brazilian authorities. We will be glad to report back to our capital the discussions held in this session. The improvement of the productivity and competitiveness of MSMEs is a continuous goal of the Brazilian government.

507. Regarding the document IP/C/W/622, while we favorably view the discussion contained in it, our understanding is that adopting a work programme would depart from the ordinary practice of this Council.

14.17 New Zealand

508. Thank you to the co-sponsors of this item for putting it on our agenda and also for their comprehensive presentations. Also thanks to those who have since taken the floor to add their experiences. MSMEs play an extremely important role in New Zealand's economy and New Zealand recognises the importance of promoting inclusive innovation and business collaboration and building capability. In the interest of information sharing we would like to briefly outline New Zealand's two government agencies which support innovative businesses.

509. The Callaghan Innovation has a domestic focus and offers a range of services and tailored programmes to businesses involving innovation and IP. This includes access to experts, technology and product development, innovation skills, business collaborations and research and development grants.

510. New Zealand Trade and Enterprise is an international business development agency whose purpose is to help New Zealand businesses grow internationally. It offers a range of similar services and tailored programmes to assist businesses to expand into new markets. It also
promotes New Zealand to foreign businesses and investor as well as helping businesses and investors in innovation as well as making international connections and mutually collaboration across international borders.

### 14.18 Bangladesh - on behalf of the LDC Group

511. I thank the proponents Australia, the European Union, Japan, Switzerland, the United States and Chinese Taipei for submitting such an important issue for discussion. I thank them for sharing with us their good and exciting experiences with MSMEs in their countries. It is true that micro, small and medium-sized enterprises are the real pivotal force for the national and global trade and commerce and this could not be more factual and relevant for LDCs because as mentioned in the submission, we also see the importance for employment, production of goods for daily necessities, agriculture, poverty reduction, empowering of women, savings, export and other social development. All these factors are particularly dependent on the activities of MSMEs in LDCs.

512. However, if we examine the status and investment of MSMEs in the LDCs, we see that establishment and securing an IP regime may or may not play a role for their development. A prerequisite for the development of MSMEs in LDCs is the creation and promotion of an ambiance for innovation first rather than enforcement of an IP regime.

513. In Bangladesh, the number of MSMEs are around 1.6million. MSMEs constitute 99% of private industrial establishments and provide 70-80% employment of the non-agriculture labour force. We have the two largest end-users in the world, one is Brac Bank and the other is Grameen Bank and they principally deal with employing the SMEs. In addition the Government also disperses huge amount of micro-credit for MSMEs. Our experience shows that if the MSMEs are provided with an enabling environment for innovation, they are better. We have seen that MSMEs usually use the local genetic resources, traditional knowledge and traditional cultural expressions to the advantage of their business and development.

514. So, if we have to protect anything, then we will have to protect the genetic resources, traditional knowledge and traditional cultural expression of the different countries locally and globally. The agenda items 4, 5 and 6 or the IGC can also be important in this regard. This national and global protection will create a beneficial and supporting environment for innovation. Going for protection of IP without promoting and securing these elements will be like putting the car before the horse. We also have to remember that the nature and orientation and the very differentiation of MSMEs in developing countries and LDCs are starkly different from those in developed countries. So, local realities in developing countries and LDCs must be considered when we look for ways and means for development of MSMEs. A simple combination of two different environments would be erroneous. I, again, thank all the proponents for introducing such an important issue to the Council.

### 14.19 Nigeria - on behalf of the Africa Group

515. Let me thank the proponents of this agenda item and, of course those who have shared their experiences. In particular, the presentation by Japan was a very good one, because at least there is involvement of the young ones. Because in Nigeria we say "you catch them young", so at least when you start with universities it is a welcome development. This item is coming at an important period when the Government of Nigeria is increasing its effort to diversify Nigeria's economy. In this context, the Government of Nigeria has launched a nationwide project code named “MSME Clinics” to address the challenges faced by the MSMEs in Nigeria. The project will serve as a one-stop shop to address the challenges faced by small business owners. According to the Nigerian National Bureau of Statistics, over 37 million MSMEs operated in Nigeria between 2010 and 2013. To encourage MSMEs in Nigeria to use intellectual property, there are a number of programmes that are on course at the moment, like the one on national awareness programme on intellectual property rights and technology information in patent documentation; and, also other collaborative efforts are under way between the Office of the National Office for Technology Acquisition and Promotion of Nigeria and then the Small and Medium Enterprises Development Agency of Nigeria.