Manufacturing Related Services Action Plan (MSAP)
Final Review
Endorsed by CTI on 10 November 2020

Introduction
Overview
Strong, open and competitive service sectors are important drivers of economic growth and job creation. Services represent approximately 70% of total APEC GDP. In addition, due to closer integration of services in manufacturing, services have become an important determinant of competitiveness of manufacturing sectors for firms of all sizes.¹

The Covid-19 pandemic has significantly strained the global supply chains for goods and services, and has had devastating economic impacts throughout the Asia-Pacific region. It is critical to support capacity building and efficiency in international trade in order to facilitate swift economic recoveries, as promoted in the statement issued on 5 May 2020 by APEC trade ministers.¹ Manufacturing related services are particularly crucial for economic recovery, as they are a key component of many multi-economy supply chains.

Manufacturing related services also play an important role in industries that are directly combating the pandemic, such as the manufacturing of personal protective equipment (PPE), critical healthcare equipment such as respirators and ventilators, and eventually vaccines for the virus, which will necessitate significant international cooperation. APEC-wide alignment on key issues such as how to define manufacturing related services, and support the further liberalization of trade in these services has never been more critical.

MSAP Background
APEC leaders first addressed the importance of manufacturing related services in 2014, and in that year’s APEC Economic Leaders Meeting (AELM) declared that they “welcome the initiative on manufacturing related services in supply chains/value chains as a next generation trade and investment issue, and instruct officials to develop a plan of action in 2015.” Responding to this instruction, the APEC Policy Support Unit (PSU) produced a study on “Services in Global Value Chains: Manufacturing Related Services”² (hereafter referred to as the “PSU Study”).

In 2015, APEC ministers welcomed the endorsement of the Manufacturing Related Services Action Plan (MSAP). There were three critical factors to the launch of MSAP:

- Identification of key action agendas with a view to reducing trade and investment barriers and improving the trade and investment environment;
- Describing the necessity of considering cooperation/capacity building programs;
- Establishing mechanisms for the implementation and review of MSAP itself.

MSAP seeks to reaffirm the “APEC Principles for Cross-Border Trade in Services” endorsed by the Leaders in 2009. In addition, the key MSAP agenda is to examine trade-related measures affecting manufacturing related services. Such measures may have been highlighted in:

• APEC PSU case studies;
• Economies’ domestic policy initiatives;
• FTA/RTA negotiations;
• Initiatives in relevant APEC fora and sub-fora.

MSAP contributes to a number of key APEC initiatives, including the shared commitment to achieve free and open trade and investment in the Asia-Pacific by 2020 (the Bogor Goals). MSAP was also identified as one of the APEC-wide actions in the APEC Services Competitiveness Roadmap (ASCR, 2016).

APEC plays a critical role in defining, shaping and addressing the Next Generation Trade and Investment Issues (NGeTI’s) that a prospective Free Trade Area of the Asia-Pacific (FTAAP) might face. In the Collective Strategic Study (CSS) on Issues Related to the Realization of the FTAAP (2016)³, “Manufacturing related services in supply chains/value chains” was mentioned as an APEC-Endorsed NGeTI. Thus, implementing MSAP also contributes to the eventual realization of the FTAAP.

Interim Review of MSAP
APEC conducted the Interim Review of MSAP (2018) to collect and analyze the information on the current state of relevant APEC regulatory regimes and policy environments, and to develop plans for future cooperation and capacity building. Prior to the review, 13 APEC economies - Chile; China; Hong Kong, China; Indonesia; Korea; Malaysia; Mexico; Peru; Philippines; Singapore; Chinese Taipei; Thailand; and Viet Nam - reported their achievements and positive progress on the key MSAP action agendas.

Based on the PSU Study and the information collected from the 13 APEC economies, the Interim Review summarized the present state of regulatory regimes in six categories:

• Investment policy
• Employment and business travel restrictions
• Custom-related procedures;
• Standards and conformance;
• Intellectual property;
• Regulatory and policy environments.

The Interim Review highlighted progress reported by APEC economies in each of these focus areas, and also recommended next steps for APEC to take as part of MSAP.

Summary of MSAP Actions
Since the PSU Study and the inception of MSAP in 2015, APEC has supported a number of actions to further the liberalization agenda. These include:

• Survey: The Progress of Implementation of MSAP for Interim Review (2018);⁴
• Interim Review of MSAP (2018);

⁴ Conducted by Japan’s Ministry for Economy, Trade and Industry (METI)
• Study for Final Review of MSAP (2020);
• Workshop on MSAP (2020);
• Survey: The Progress of Implementation of MSAP for Final Review (2020),
• In addition, inspired by the work undertaken under the MSAP, Malaysia has proposed, and GOS has endorsed, a workshop entitled The Growing Importance of Manufacturing Related Services (planned for 2021).

The results of the 2018 MSAP implementation survey were used as a key input to the Interim Review, and the 2020 survey will update and build on those findings.

The 2020 Workshop on MSAP provided a forum for stakeholders from the public and private sector to share ideas about how to deliver the MSAP agenda, including vital topics such as how economies can best move forward on the liberalization of manufacturing related services despite the strain on global value chains from the covid-19 pandemic, and exploring how to best implement new capacity building activities. Malaysia’s 2021 Workshop will build on MSAP work by focusing on more specific issues, such as how economies can implement better manufacturing related policies, and how APEC can work towards a common definition of manufacturing related services in the region.

The Study for Final Review of MSAP is designed to help APEC economies to deepen their understanding of the integration of services in manufacturing, build capacity to analyze the current status of manufacturing related services, and to better understand the trend of liberalization commitments for those services in recent FTAs. The project is a component of the Final Review of MSAP, which was endorsed by the APEC CTI in March 2019.

**Study for Final Review of MSAP**

**Overview**
The project studied how manufacturing related services are classified in the Central Product Classification (CPC version 2.1). The study also analyzed the chronological changes of APEC member economies’ commitments for manufacturing related services in the WTO General Agreement on Trade in Services (GATS) and FTAs through a case study approach that considered updates to specific codes as well as broader commitments in FTAs/RTAs. The work provides insight into how manufacturing related services are categorized, as well as how APEC economies address these services in trade agreements. Ultimately, the research highlights tools that APEC economies can utilize to liberalize trade in manufacturing related services.

**Categorizing Manufacturing Related Services**
Understanding the evolution of liberalization commitments regarding manufacturing related services first required the study to settle upon a concrete definition of such services, which was enabled through analysis of the PSU Study.

Subsequently, the report creates crosswalks to facilitate comparison between how these services were categorized in different versions of the CPC. The CPC has gone through a number of iterations since its first version, the Provisional CPC, was published in 1991. Newer versions such as CPC 2.0, which may better reflect modern services trade activities than the older versions, have been used for recent research studies by APEC and other organizations. As a result, these crosswalks are required for any

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5 Conducted by Japan’s Ministry for Economy, Trade and Industry (METI)

6 Proposed by Malaysia, and co-sponsored by China, Indonesia, Japan and Peru
A robust analysis of changes in liberalization commitments over time. The results of this work are published in an Annex of Microsoft Excel workbooks published alongside the main report.

**Liberalizing Manufacturing Related Services through Trade Agreements**

Based mainly on case studies from three APEC economies (Australia, Canada, Peru), the report explores ways in which modern bilateral and multilateral trade agreements can be used to promote trade in manufacturing related services. Measures include the removal of restrictions from scheduled commitments, progressive provisions within the main bodies of the agreements, and negotiated “side letters” and memoranda of understanding.

**Questionnaire Survey for follow-up the interim review**

As a follow-up to the interim review, APEC economies were requested to complete a survey of APEC member economies in June 2020. The survey collected responses from economies on their progress in meeting various MSAP goals and in their collaborative activities regarding trade in services. This survey provides an update on economies’ activities since past survey in 2018. Seven APEC economies - Hong Kong, China; Indonesia; Korea; Peru; Singapore; Chinese Taipei; and Thailand - reported their achievements and positive progress on the key MSAP action agendas.

**Current State of the Regulatory Regimes and Policy Environment**

The Interim Review of MSAP reported policy implications from the PSU Study, as well as reported achievements among APEC economies in the six key categories noted above. These results are now augmented by findings from the Study for Final Review of MSAP.

In addition to the categories that were identified by the PSU Study, the Study for Final Review of MSAP also addresses limitations on cross-border data flows, which have grown in salience since the PSU Study was published in 2015. As the Study for Final Review of MSAP focuses on measures that have been implemented through trade agreements, it does not provide new insight into how domestic policy and regulatory environments relate to manufacturing related services.

**Investment Policy**

*Policy Implications from the PSU Study (2015)*

Foreign direct investment (FDI) restrictions among service sectors prevent firms from operating the most efficient business model. In addition, sudden changes in investment policy freeze expansion plans and increase costs. Meanwhile, many governments provide incentives and subsidies to attract FDI, however, protectionist policies force FDI to locate and increase operations domestically through the imposition of local content requirements add operational costs especially when local suppliers are not the most efficient service providers.

*Policy Insights from Study for Final Review of MSAP (2020)*

A common method to restrict FDI is to implement investment screening levels that trigger a review of the investment once it exceeds a certain amount, in order to ensure that the investment does not run contrary to the economy’s interests. While screening levels are typically set at a certain amount, FTAs offer an opportunity to increase those levels. Raising FDI screening levels liberalizes the regime and makes investing in the economy more attractive because at a higher screening level, investors are able to invest more money and avoid the negotiating the bureaucracy of the review process, reducing costs and time.
Setting up an investor-state dispute settlement (ISDS) is another mechanism implemented through trade agreements to resolve FDI disputes. If both the investors’ home economy and the host economy have agreed to an ISDS, then a foreign investor that believes that their rights have been violated by the host economy may bring the matter before an independent tribunal, usually comprising three arbitrators.

Case study economies also addressed some FDI restrictions through updating their obligations for specific manufacturing related services. For example, Peru’s original GATS obligations had more requirements for foreign firms that provided freight insurance services except for reinsurance. However, the Peru-China FTA (2009) liberalized the economy’s restrictions by permitting foreign firms to provide freight insurance services provided that they follow some additional requirements, while the Korea-Peru FTA (2010) and Mexico-Peru FTA (2011) further reduced the restrictions on insurance provided by foreign firms.

Positive Progress/Achievement among APEC Economies

- Allowed foreign companies to have more ratio of equities (e.g. equity policy for foreign investors could hold 100% of the equity in all investments in new projects, as well as investments in expansion/diversification projects by existing companies, irrespective of the level of exports and without excluding any product or activity, etc.).
- Released a catalog of advantageous foreign-funded industries in some areas and expanded the scope of the foreign-invested industries.
- Establishment of several pilot free trade zones.
- Stopped requiring application for foreign business permission in several service sectors (e.g. (1) financial institution business and businesses incidental to or necessary for the operation of a financial institution business, (2) representative and regional office of foreign juristic person in international trade service, etc.).
- Relaxing foreign equity restriction (e.g. lifting or easing existing restrictions on foreign participation in selected investment areas to raise the economy’s level of competitiveness, and to foster higher economic growth in ASEAN and beyond through joint endeavors and partnerships with other economies).
- Investment promotion policy for the companies that obtains investment promotion certificate from a relevant authority in some service sector (e.g. creative product design and development center, electronics and engineering design, high value-added software, container yards or inland container depots, research and development).
- No market access restrictions in some service sectors (e.g. computer and related services, engineering services, real estate services, services related to agriculture, hunting, and forestry, maintenance and repair of equipment (not including vessels, aircraft, or other transport equipment), packing services and printing).
- Released and upgraded the negative list to ensure transparency in foreign investment restrictions (e.g. allowed more business fields to have more than 60% foreign equity participation with a clearer arrangement by the revised negative list).
- Granting FDI incentives for re-investment of unused retained earnings, which has been previously unrecognized as foreign direct investment (e.g. foreign-invested companies have become eligible for local tax reduction benefits even if they reinvest domestic reserves).
- Ensuring a level playing field for all so that there are no foreign ownership restrictions.
- Providing an investment guidebook to share the latest updates with investors.
Employment and Business Travel Restrictions

Policy Implications from the PSU Study (2015)
Although providing best service needs flow of people, various restrictions are illustrated in the PSU study such as worker quotas, economic needs test, complex entry requirements and discretionary decision-making procedures on recognition of qualifications. Furthermore, restrictions and a lack of mutual recognition of qualifications hamper companies’ ability to provide the best service.

Policy Insights from Study for Final Review of MSAP (2020)
Case study economies often eased their employment and business travel restrictions through FTAs by removing specific reservations from their original GATS commitments for some manufacturing related services. For example, Canada’s commitments in FTAs such as the CPTPP and USMCA include updates to manufacturing related services such as management consulting, architectural consulting, or advisory and consultative engineering services, which removed or reduced several provincial requirements for citizenship or permanent residency for accreditation for the persons employed in those professions in those provinces. Similarly, Peru has reduced its certification requirements for foreign architects and engineers in its recent trade agreements.

In other cases, FTAs provide opportunities for economies to remove various restrictions and bureaucratic barriers to entry for business persons. For example, the Canada-Korea FTA addressed employment and business travel restrictions for the temporary entry of business professionals through reducing the documentation requirements for the temporary entry of business persons, and removed some bureaucratic barriers to entry, such as economic needs tests, as well as prohibiting the implementation of barriers in the future, such as quotas and proportionality tests.

FTAs also provide an opportunity to address localization and human content restrictions. In some cases, economies may also have localization requirements for individual manufacturing related services, which can be liberalized through trade agreements that either reduce or eliminate the restrictions.

FTAs may also include broad agreements between economies to prohibit localization across all sectors. For example, the Peru-Australia FTA prohibits localization through the commitment that neither economy may limit the total number of natural persons that may be employed in a particular service sector. The FTA also states that neither economy may require investors to appoint individuals to senior management positions based on their economy with some exceptions.

Positive Progress/Achievement among APEC Economies
- Enhancing the rights of foreign business persons (e.g. extending justifiable reasons for workplace change).
- Reviewing the list of occupations which do not allow to hire foreigners to decrease obstacles for hiring foreign workforce and employment regulations.
- Simplifying the procedures for the use of foreign workers.
- Providing a list of positions that can be filled by foreign workers in one list for various sectors.
- Providing privileges such as getting permission to bring in skilled personnel and experts into the economy to the companies that obtains investment promotion certificate from a relevant authority.
- Streamlining the process of obtaining work visa such as enabling applicants to submit documents (e.g. through the one-time online single window application at the one-stop service center).
- Setting new types of visas (e.g. for foreign experts, executives, entrepreneurs and investors).
- More engagements in international/regional mutual recognition agreements (e.g. APEC Engineers, APEC Business Travel Card (ABTC), etc.).
• According privileges which are given to ABTC holders such as exemption from visa requirement.

Customs-Related Procedures

Policy Implications from the PSU Study (2015)
The PSU study illustrated additional business costs occurring in customs procedures. For instance, customs issues on valuation such as a lack of effective implementation of single-window project still persist. Complex procedures along with the discretionary aspects of some customs decisions and necessity the employment of customs brokers cause costs. The PSU study also pointed out costs of human intervention in customs transactions still persist. In addition, the PSU study mentioned that absence of agreement on the definition of re-manufactured goods limits opportunity to conduct remanufacturing business worldwide because trade in re-manufactured goods is banned in some economies.

Policy Insights from Study for Final Review of MSAP (2020)
Trade agreements are an avenue towards bilateral or multilateral agreements on clear standards and definitions for manufactured and re-manufactured goods. For example, the Australia-US FTA has specific guidance for remanufacturing, which is an important sector for both economies, as the US is the largest remanufacturer in the world, and Australia represents the third largest market for remanufactured goods. Reviews have shown that remanufacturing is an environmentally friendly process, both by having a smaller impact on natural resources and reduced energy consumption, and provisions in the FTA promote the production and use of these products. The FTA sets the rules for remanufactured goods as an originating good, which facilitates their trade and production, essentially providing them with preferential treatment.

Another example is the CPTPP. Participating economies must adopt or maintain simplified customs procedures for the efficient release of goods in order to facilitate trade between them. Except under certain circumstances, exporters can self-certify that the product they are exporting meets the CPTPP rules of origin, so there is no need for the firm to go through third-party certification of origin, and enterprises can self-certify to obtain advance rulings; which helps to prevent the delay of goods because of complex customs procedures. Additionally, the partnership includes targeted timeframes for customs clearance including 6-hour windows for express shipments. Notably, the targeted timeframes include manufacturing related services such as back office processing, warehousing and retail, in order to facilitate firms in delivering the skills associated with manufacturing, sales and servicing.

Positive Progress/Achievement among APEC Economies
• Streamlining customs through expansion of authorized economic operator mutual recognition agreement (AEO MRA).
• Enhancing single window system.
• Implementation of WTO Trade Facilitation Agreement (TFA).
• Extending paperless export clearance system, no requirement of mandatory use of specified customs brokers and so on.

Standards and Conformance

Policy Implications from the PSU Study (2015)
The PSU study indicates that a lack of clarity in standards requirements imposes additional unnecessary costs. Although it does not actually yield additional meaningful information or public policy advantage, duplicative testing and accreditation in various jurisdictions are often required, which multiply costs both in terms of time and money. Because of that, SME participation in GVC is
often stymied by the difficulty of obtaining relevant standards/certifications due to their costs and complicated requirements. Another example from the IT industry is introduced in the study that as numerous standards especially for IT industry are different in economies, the companies need to allocate substantial resources to follow the requirement.

Policy Insights from Study for Final Review of MSAP (2020)
Many manufacturing related services involve work that requires certification and a high level of knowledge that must be transferred across economies by visiting workers, such as architects, engineers, or consultants. If an economy does not recognize the qualifications for skilled services workers in specific fields, then it can be challenging for those services industries to maintain standards requirements in multiple economies. Some economies have placed reservations on those service industries through GATS to require all workers to possess either economy-level or regional certifications, sometimes also including a domestic commercial presence or a requirement for citizenship and/or permanent residency. However, those requirements may be updated in trade agreements to eliminate some or all of those requirements for business persons from those trading partners. Among the case study economies, Peru and Canada both have updated their GATS obligations to reduce the licensing and certification requirements for various types of professional services.

In addition, mutual recognition agreements (MRAs) can help to encourage bilateral services trade by allowing foreign services professionals to qualify for work in other economies through their home economy’s certification. Several trade agreements studied in the case study economies included commitments to set up MRAs on manufacturing related services industries. For example, Australia and Indonesia negotiated a Side Letter on an Engineering MRA as part of the Australia-Indonesia Comprehensive Economic Partnership Agreement (CEPA), which outlined commitment between both economies to facilitate cooperation between the relevant bodies to assist Indonesia to reach internationally benchmarked standards for engineering education.

Positive Progress/Achievement among APEC Economies
- Streamlining the procedure by expanding network of mutual recognition systems so that the signing parties do not need to conduct further test if the products were tested and certified by an approved test lab in another signing party. (e.g. expanding a footprint of "checked once, accepted everywhere").
- Reviewing domestic process of obtaining standards to avoid redundancy through various measures such as overviewing and coordination between relevant ministries conducted by a competent authority in order to avoid unnecessary duplication in standardization process.

Intellectual Property
Policy Implications from the PSU Study (2015)
Transfer of advanced technology could be influenced by policies related to intellectual property rights (IPR) in host economies. Some types of policies have barred the host economies from obtaining advanced technology. For example, according to the actual case described in the PSU study, requirement for submitting source code information made a firm not to sell its most modern product models in the economy concerned.

The PSU study indicated that having reliable and qualified local partners and effective regulatory frameworks and government enforcement of IPRs are important to protect most advanced IPRs. In addition, enforcement capability of IPRs in host economies is key to prevent counterfeit products, trade mark infringement and etc.
**Policy Insights from Study for Final Review of MSAP (2020)**

Trade agreements offer an opportunity to strengthen IP protections between economies. For example, the China-Australia FTA in 2015 reaffirmed both parties’ existing obligations under the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPs Agreement), including a provision for both economies that each government effectively guarantees that citizens of the other economy will receive treatment no less favorable than that afforded to its own citizens.

In addition, trade agreements may include commitments to mutually enhance their IP examination and registration systems, to provide border measures in relation to counterfeit trademark or pirated copyright goods, or on the protection of undisclosed information.

**Positive Progress/Achievement among APEC Economies**

- Enhancing protection of IP rights (IPR) through governing penalties, providing consultations to companies operating in foreign economies on IPR protection and capacity building for host economies to enforce effective protection against counterfeit goods.
- Enhancing protection of trade secrets through strengthening penalties and expanding the scope of trade secrets.
- Enhancing protection of IP rights (IPR) through expanding regulation and penalties to the digital field.
- Participating international agreement to enhance implementation of IPRs protection.
- Initiatives to lower the costs of filing a patent and trademark and extend the grace period for patent applications.
- Initiatives on the regional patent work-sharing programme (e.g. ASPEC) to accelerate the patenting process.

**Regulatory and Policy Environment**

**Policy Implications from the PSU Study (2015)**

The PSU study notes that non-transparent, inefficient and frequent change of government regulations/policies increase business costs and require unwanted change of business plans. In particular, inefficiency and delays in government services disrupt company plans and targets, and impose significant costs. Even when the laws and regulations are transparent, frequent changes are challenging for foreign firms.

**Positive Progress/Achievement among APEC Economies**

- Increasing online information disclosure and public relations activities, identifying procedures to introduce regulations.
- Gathering public comments for new regulations among others have seemed common policy approach toward this issue.
- Initiatives on facilitating discussions between central and local government to secure consistency in application of laws, regulations and policies.

**Limitations on Cross-Border Data Flows**

**Policy Insights from Study for Final Review of MSAP (2020)**

The ability to transfer data easily across borders is vital because data is driving research and development, supports services trade, and is a foundational element of global value chains. Many large manufacturing firms create and transfer large amounts of data, and may be hampered by restrictions on cross-border data flows, especially as many manufacturing firms are becoming more
services-oriented. As a result, recent trade agreements such as the USMCA are now targeting this as a new topic area to address.

Canada, the United States, and Mexico have worked to improve cross-border data flows through three specific commitments in the USMCA. The three economies agreed not to prohibit or restrict the electronic cross-border transfer of information, including personal information, if this activity is for business purposes. In addition, the agreement prohibits parties from requiring the use or location of computing facilities in that parties’ territories as a condition for conducting business in that territory, and includes a commitment to sharing best practices of digital trade, such as cooperating to identify and mitigate cyberattacks.

Similarly, the Peru-Australia FTA (PAFTA) states that Australia and Peru cannot force businesses to build data storage centers or use local computing facilities. Australia and Peru have committed not to impose these kinds of localization requirements on computing facilities, which provides more certainty to businesses as they look to optimize their investment decisions.

**Review of Implementation of the MSAP Action Agenda**

APEC economies endorsed the MSAP agenda with a view to increasing availability and accessibility of services through progressive liberalization and facilitation of manufacturing related services, and furthering deepen economic integration in the region. In realizing this agenda, MSAP has been an impressively successful endeavor.

As the results of the 2018 implementation survey revealed, APEC economies in recent years have taken a number of significant steps to promote trade liberalization and economic cooperation.

Economies have negotiated innovative trade agreements at the bilateral and multilateral levels, modernized their domestic regulations to encourage FDI, streamlined required business procedures, and engaged in a variety of domestic initiatives.

All of these activities have served to reaffirm the APEC Principles for Cross-Border Trade in Services (2009) and contribute to the realization of a FTAAP. In addition, the 2018 implementation survey gathered feedback from across APEC about capacity building needs that economies believe APEC should work to address. Future actions on MSAP, including studies and workshops, will benefit from these insights.

The PSU Study (2015) laid a strong foundation for MSAP by providing numerous in-depth cases about the supply chains and related services for manufacturing firms across the APEC region. Through MSAP, APEC built on this well by synthesizing the vast array of challenges faced by these firms into six categories, which simplifies the process of effectively addressing each of them. The Study for Final Review of MSAP further explores how challenges to trade in manufacturing related services have been addressed in modern FTAs/RTAs between APEC member economies.

The Study for Final Review of MSAP will assist government officials and researchers to assess changes to scheduled commitments regarding manufacturing related services in trade agreements. This will allow economies (or APEC itself) to take stock of previous liberalization commitments, which is a necessary cornerstone for the setting of enhanced goals in future. In this way, difficulties that may be introduced by periodical changes to the classification of services in the CPC have been overcome.
The Study also includes analysis of each of the regulatory categories flagged in the PSU Study, describing the set of measures included in each category, the circumstances in which they may be applied, and their effects on international investors and service providers. Moreover, the study gives insight into another key area, cross-border data flows, which is a growing topic of importance. The research lays out detailed good practice examples of how modern trade agreements between APEC economies have been used to promote the MSAP agenda in a multitude of ways. The publication of this study provides stakeholders with a repository of good practices that can be used as a reference for future discussions and capacity building work.

The 2020 MSAP Workshop provided a valuable forum for stakeholders from industry, government, and academia to discuss issues concerning manufacturing related services. The participants considered new opportunities for collaborative activities for APEC member economies to better support the future liberalization of services trade across the Asia-Pacific region.

Moreover, the 2020 MSAP implementations survey has provided further data on how APEC economies have acted at the domestic and international levels to facilitate trade in manufacturing related services, and the role of manufacturing-related services in recovering and sustaining the global supply chain of goods and services strained by the current covid-19 pandemic.

Finally, related to activity under MSAP, the Workshop on The Growing Importance of Manufacturing Related Services (currently planned to be held in New Zealand in the first half of 2021) will provide another forum to discuss this topic, and to raise awareness of the importance of manufacturing related services, especially under the current covid-19 pandemic. The workshop intends to build capacity to develop new and improved manufacturing related services policies, as well as to explore on how APEC economies can capitalize opportunities in manufacturing related services. It will also seek feedback from APEC economies to find common criteria of manufacturing related services across APEC economies to develop the base for a common scope and eventually a common definition of manufacturing related services for APEC.

**Future Steps for APEC Cooperation/Capacity Building on Implementation**

The 2018 MSAP Interim Review included the key elements for cooperation/capacity building to help economies take concrete actions to address their primary goals for trade in manufacturing related services. In 2020, it is more crucial than ever to continue this effort in order to facilitate swift recoveries from economic downturn triggered by the covid-19 pandemic, as mentioned in the introduction of this Final Review.

The Interim Review noted that APEC should conduct further studies and hold workshops and dialogues on this topic, primarily to facilitate capacity building. APEC should bring stakeholders together to discuss experiences and share good practices in facilitating trade in manufacturing related services. As part of these actions, APEC should focus on:

- Further review of existing laws and regulations on manufacturing related services in APEC economies;
- Capacity building needs reported by APEC economies in the 2018 and 2020 MSAP implementation surveys;
- Offers from APEC economies to engage in capacity building initiatives;
- The rapid development in technology and its effects on liberalizing and facilitating trade in manufacturing related services.
APEC should also look to enhance transparency measures related to trade in manufacturing related services through organizational initiatives and the databases of other international organizations. For example, APEC’s Group on Services (GOS) initiative to develop an index to measure the regulatory environment of services trade in the region, while the OECD has the Services Trade Restrictiveness Index (STRI). Although the OECD STRI does not include manufacturing related services as a sector, APEC should ensure that there is no duplication of effort between the two indexes related to other services.

Another area for further review is exploring opportunities for the harmonization of the policy regimes for existing bilateral or plurilateral FTAs, such as ASEAN+X FTAs and CPTPP, and whether there are areas where APEC can play a facilitating role to harmonize member economies’ policies in some sectors or modes of trade in a way that is fair to all and equitable.

In light of the COVID-19 pandemic, it is important to look at the pandemic’s implications for services access and provision by firms. Future action items for MSAP in this regard could include studying the impact of government containment measures, such as movement control orders and social distancing guidelines, on services access and provision. As governments move towards supporting the recovery of the services sector, it will be imperative to explore and learn from one another how the recovery can be facilitated.

The rapid development of technology, especially online/remote technologies that have become critical for many firms during the COVID-19 pandemic, will have a significant effect on manufacturing and services trade, and future work on manufacturing services should take the digital transition in services into account. In addition, it may be valuable to conduct research to explore the implications of these new technologies for liberalizing and facilitating trade in manufacturing related services, and whether it is feasible for APEC economies to collaborate on setting standards that might help to further liberalize the services impacted by those technologies.

Following conclusion of this Final Review of MSAP, and based upon the 2020 MSAP implementation survey, APEC economies should consider acting on the capacity building needs that have been reported. The 2021 workshop, hosted by Malaysia, will include a discussion on capacity-building activities, which is expected to lead to suggestions for additional actions APEC may take in this area.