



**Asia-Pacific
Economic Cooperation**

**MANAGING THE LONG-TERM
ECONOMIC EFFECTS OF THE FLEXIBLE
WORK ARRANGEMENTS**

APEC Practices and Recommendations

APEC Economic Committee

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OVERVIEW

The proliferation of teleworking and other flexible work arrangements during the COVID-19 pandemic is going to have a long-term effect on the way we work even after the pandemic ends. It is crucial to foresee the long-term economic effects of such a change and adopt timely regulatory measures to manage the implications. The Asia Pacific region currently may not be the leading region in terms of adopting teleworking (as [in an average company](#), the share of employees working remotely in Asia Pacific economies during COVID-19 is 66.7%, while in Europe it is 70%). However, in 5 years from now the Asia-Pacific region is projected to have the biggest share of workers performing their jobs remotely (45.1% in APEC and 41.1% in Europe).

This shift will be largely driven by the digitalization of APEC economies, thus requiring work in three broad areas. First, immediate and adequate **investment into digital infrastructure**. Second, adoption of teleworking and other flexible work formats requires that the necessary **regulatory amendments** be made promptly to eliminate any potential barriers. Last but not least, not all of the workers have the **skills** needed to seize the opportunity, even if new job places are created. Thus, mass digital upskilling needs to take place to support the shift of the labor force to digital.

This report is structured in accordance with these three main themes. It contains a comprehensive overview of trends and economic effects of the proliferation of flexible work arrangements, and a list of current regulatory practices and recommended measures that APEC policymakers could take into account when forming their post-COVID-19 adaptation plans. The report was prepared based on the answers of APEC economies to the questionnaires distributed in November 2020 and January 2021, as well as open-source information.

I. MAJOR TRENDS AND ECONOMIC EFFECTS

The epidemiological situation during the spread of the COVID-19 infection and the mandatory social distancing measures led to the massive shift of employees to remote work. Despite the forced nature of such innovations, teleworking and other remote work formats will remain an important component of the post-COVID world. [Research by the International Labor Organization](#) has shown that companies which implemented flexible work rate its positive aspects higher than those that have not yet applied teleworking. Given the fact that organizations were forced to massively implement remote work during the quarantine, we could assume that this format will remain in labor practice even after the pandemic. Teleworking will be less common than during the lockdown, but will become more formalized and well-structured.

The proliferation of flexible work formats can boost the economic growth significantly. [A study](#) conducted shortly before the coronavirus pandemic showed that the introduction of flexible work formats in the United States would bring the economy an additional \$ 2.36 trillion annually, i.e., increase GDP by about 11%.

At the same time, remote work is not a silver bullet for productivity growth, as it cannot be implemented in all the sectors of economy evenly. [On average](#), only 31% of employees [in OECD economies](#) can be shifted to teleworking. The most suitable areas for remote work are finance and insurance, professional services and management, IT and telecommunications. In addition, professionals with high education levels and high income are more likely to shift to remote work with low or no impact on their wages and career.

The spread of flexible work formats after the coronavirus pandemic will lead to the following **systemic changes**:

- **Diversification of work formats**

The days of attending the office on a daily basis are not likely to resume once the COVID-19 pandemic is over. Knowledge workers have become accustomed to working remotely, and splitting time between the office and home is expected to become the new normal, according to a new [PwC report](#). More than half (55 percent) of 1,200 workers surveyed said they prefer working remotely three days a week. Meanwhile, 68 percent of 133 executives said workers should be in the office at least three days a week, citing concerns that company culture will not survive a purely remote work model. A survey [Gartner](#) conducted with 127 company leaders in 2020 found that only 30 percent of those leaders were concerned about maintaining corporate culture with a hybrid work model.

Certainly, large ICT companies dealing with technology were better prepared in terms of infrastructure for the remote work, since it was practiced by them before. However, in connection with the pandemic, the shift to this form of work has taken a massive character. For instance, to remove the friction of five-day-a-week commutes, [Google](#) has piloted a hybrid model in which teams come together for "collaboration days" in

the office and spend the other days doing focused work for home or the office. The company offers a 3/2 work week – a minimum of three days in the office and two at home (or wherever you work best). This pilot won't make sense for every role or every team – particularly Google employees in customer-facing roles spending lots of time with clients, employees who need to be on-site in data centers or labs. [Facebook](#) has extended the remote work mode until mid-2021, and [Twitter](#) reported that if desired (and if the specifics of the work allow), employees can remain on the "remote" mode for an indefinite amount of time. Companies notice the benefits of working remotely for both - [corporate costs and employee motivation](#). In the next 10 years, Facebook CEO Mark Zuckerberg predicts that [50% of his company's employees will work remotely](#). There is reason to believe that companies in other industries (where the specifics of the work involve a remote format) will follow this trend. All in all, the spread of flexible work formats in labor practice will set new tasks for the governments such as updating labor legislation, tax schemes, etc.

- **Outflow of population from megacities**

In the medium term, the spread of remote work (in case that restrictions on free movement between cities are lifted) will lead to an outflow of population from megacities to smaller cities with a lower cost of living. A number of small cities have already [started](#) offering additional payments to those who want to come and stay there, working remotely, thereby helping to restore the economy.

In the long-run, this trend may lead to higher prices, especially rents, in those very small cities - and to lower prices in megacities where there will no longer be hypertrophied demand. It will also contribute to the infrastructure development in small cities due to the population inflow and increased demand.

Regional and municipal authorities should take this trend into account and use it for the development of the local economy.

- **Decentralization**

The transition to remote work will help reduce the burden on infrastructure and improve the environment in large cities, giving impetus to the development of regional centers and remote areas. Regional and municipal authorities in some economies have already begun to implement measures that promote the attraction of remote employees as well as the development of local infrastructure.

Japan The government has elaborated the plan to support the shift to working from rural areas as a way to correct the concentration of industry and population in Tokyo. The newly proposed grant will be available to all municipalities except Tokyo and the prefectures of Saitama, Chiba and Kanagawa. The plan envisages covering 75 percent of expenses born by municipalities for setting up systems to accept satellite offices of companies and shared office spaces. The agencies will also ask for ¥400 million for a project to match businesses with municipalities looking to accept branch offices.

- **Rise of the gig-economy**

The growth of the freelance market will be driven by both demand- and supply- side factors, which became more evident to both organizations and potential employees during the pandemic. Lower costs, higher time efficiency, flexibility and opportunity to fill in skills gaps will entice organizations to outsource more tasks to the freelancers. On the other hand, the benefits of flexible schedule, being picky with projects and staying in a specialist role, as well as higher hourly wages, will drive the supply of freelance labor.

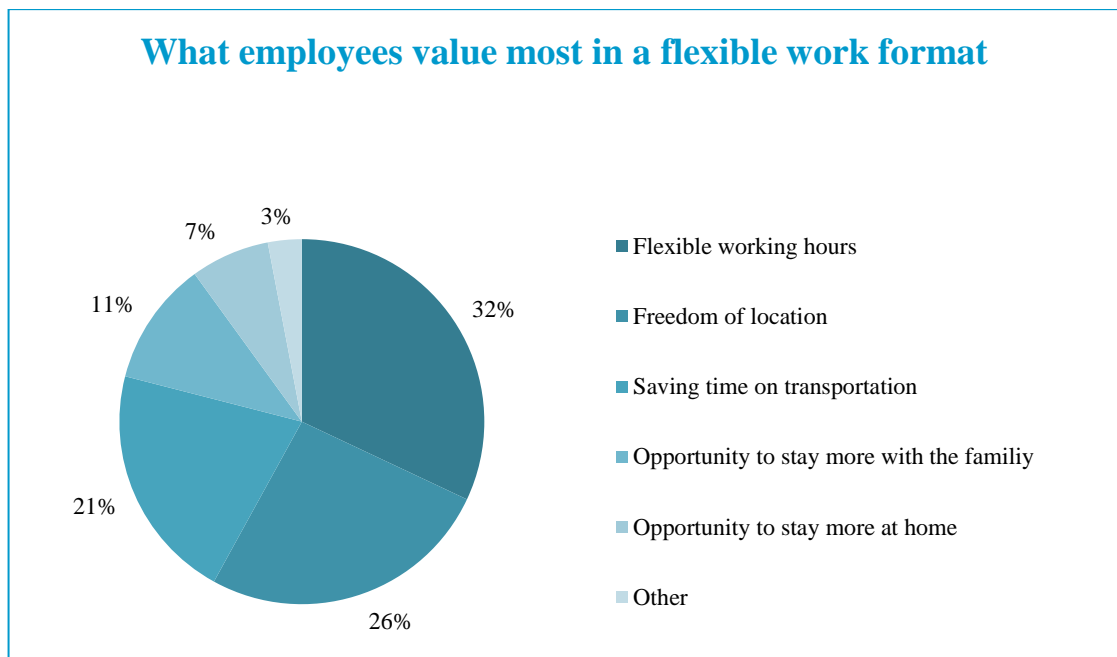
According to gig-economy [study by PwC](#), 40% of the global companies are planning to increase the number of freelancers working on company’s tasks, and 25% claim that they plan to substitute up to 30% of their workforce by freelancers.

In the long run, this trend would lead to the company operation model transformation, with many routine and specialist tasks being done by freelancers or outsourcing companies.

Opportunities arising with remote work

- **Increase in productivity**

[Research by ILO shows](#) that switching to the flexible work patterns raises employee productivity due to increased working hours (no time is spent on commuting and employees are more likely to work overtime) and improved concentration (no office life distractions). Other studies show that remote work can [boost productivity](#) due to improved well-being of the employees that is reflected in rising efficiency.



Source: World Economic Forum, 2020, USA data

In addition, organizations’ productivity can increase due to the optimization of processes. Urgent shift to teleworking might have made apparent any inefficiencies in

the workflows. Thus, operations, functions, and entire units that existed before the pandemic could be eliminated if their redundancy was apparent during the lockdown.

Mexico The shift to the remote work in the economy has increased worker productivity by 28% due to a reduction of commute time, which can be up to 5 hours a day.

- **Retention of qualified staff**

According to [ILO](#), employers who provide the option of working remotely/partially remotely are more likely to attract and retain highly qualified professionals. This category of workers is used to the best HR practices (such as occasional teleworking) and chose their employers accordingly. Similarly, at the economy level governments could [retain](#) and attract more highly qualified personnel to the economy by making flexible work formats more common.

- **Attraction of the workforce**

The availability of flexible working modes would [attract](#) more people into the workforce: [women](#), single parents, elderly, people with disabilities. [According to a study conducted before the coronavirus pandemic](#), 69% of the unemployed and economically inactive population in the United States reported that they would work if a flexible format was available to them. Also, 65% of part-time employees expressed a desire to work more hours if it could be done remotely. In numbers, this would create an additional \$ 72.3 billion in value or a 0.3% GDP increase.

- **Increase in innovation activity**

Employees who sometimes or permanently work remotely are [more likely to generate](#) innovative ideas than those who only work from the office. At the economy level, the spread of flexible forms of work can increase overall innovativeness level, driven by the increased creativity in the predisposed industries (for example, the creative economy). It should be noted, though, that the increase in innovation level is conditional to the well-coordinated communication between remote staff and the rest of the team.

- **Reduction of costs**

Even before the pandemic the organizations whose employees often worked remotely and/or had frequent business trips realized that there was no need for fixed desks assigned to all employees.

The introduction of hot desking systems [allows companies](#) reduce costs due to more efficient use of the office space. It should also be noted that remote work is more efficiently and readily used by large companies than by small and medium-sized enterprises, as it brings more economies of scale.

Less frequent usage of transport due to decreased commute can also [lead to](#) reduction in costs both for people and for the government, as negative environmental effects will be limited.

- **Emergency resilience**

Organizations that implemented systems and infrastructure for emergencies, including remote work systems, are [more resilient](#) in the times of a crisis. This pattern was witnessed even before the coronavirus pandemic (for example, in the resilience levels of organizations during the 2011 earthquake in Japan or during the 2010 outbreak of bird flu in the United States). After the coronavirus pandemic, the importance of resilient infrastructure and remote work systems will only become more apparent.

- **Asynchronous work patterns**

Another emerging trend in the usage of flexible formats is so called "asynchronous work". To work on common projects, now team members do not need to share not only the same location, but also the same time zone and work schedule. Asynchronous work was already a common practice for freelancers or for international teams before the pandemic. However, the proliferation of teleworking now is likely to drive a wider adoption of asynchronous work.

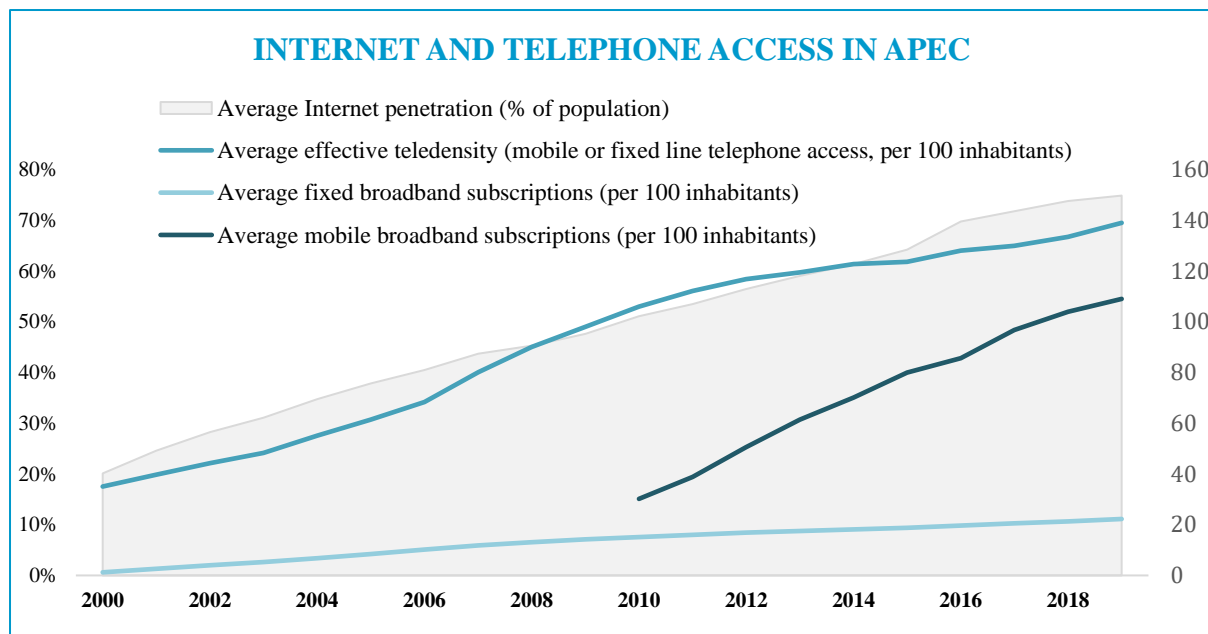
Singapore DBS Bank in Singapore introduced a work scheme in which the functions of one FTE are split between two employees (so called "job sharing scheme"). This arrangement allows employees to be flexible in choosing working hours and remain employed even in a situation of reduced business operations. Under this scheme the salary is calculated based on the worked hours by each employee and the full package of social and healthcare benefits is still provided. The responsibilities are split between co-workers based on geographical, functional or workload principle. Implementation of such scheme is conditioned to proper communication between co-workers.

II. INFRASTRUCTURE READINESS FOR GOING “REMOTE” IN APEC

There is a huge potential for digitization and innovation not only to add value to businesses and the economy in general, but also to contribute to public health, the environment, and biodiversity in APEC economies. Accelerating digitalization and innovation of manufacturing industries is critical for business continuity and economic growth.

However, the vast growth in usage of the ICT during the pandemics has revealed that there is still much room for improvement in the quality of infrastructure and technical equipment in certain companies, groups of population, regions and even economies as such. For example, in the United States, [65% of workers reported](#) that the quality of Internet connection was good enough for unhampered remote work.

This report offers an assessment of infrastructure readiness based on several indicators, in particular, Internet coverage, price for ICT usage and speed of Internet in the APEC economies to ease the evaluation of remote work readiness.



Source: International Telecommunication Union (ITU) statistical database

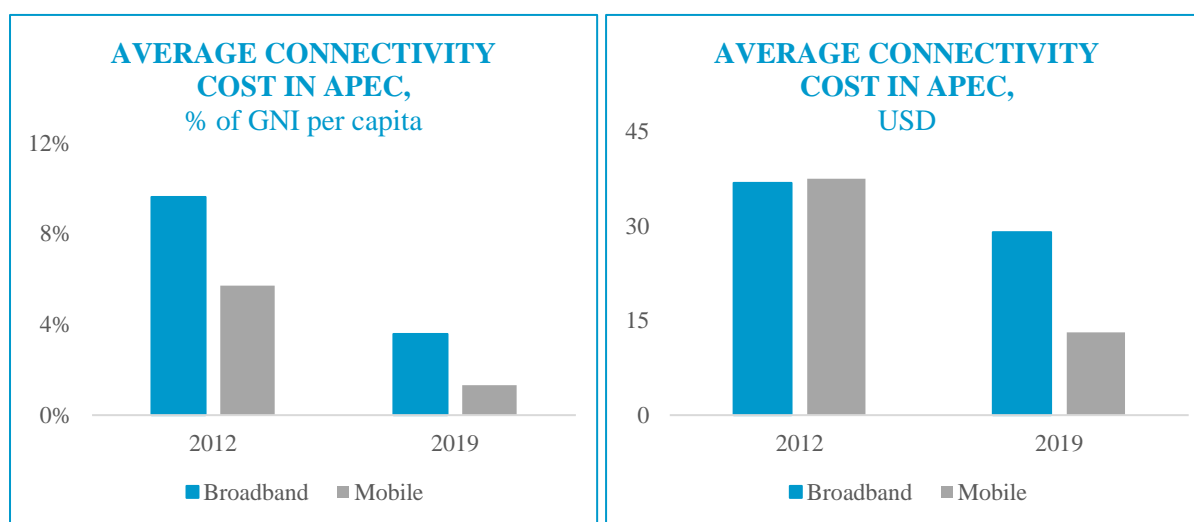
The analysis shows that the average Internet penetration¹ in APEC economies has grown significantly in the past two decades (from 20% in 2000 to 75% in 2019). However, there is still large room for improvement to ensure the full Internet coverage which is a prerequisite for effective teleworking.

¹ According to the ITU definition, Internet users are individuals who have used the Internet in the last 3 months from any device and network mode.

The effective teledensity in APEC² has surpassed 100 connections per 100 inhabitants in 2010 and by 2019 reached almost 140 connections. The number of connections exceeds one per person, as citizens tend to have separate personal and work phone subscriptions or several personal ones.

Quite expectedly, fixed broadband penetration is largely available to developed economies, while the growth of the Internet in the developing economies was largely achieved through the proliferation of mobile broadband, which took off since 2010 and surpassed 100 connections per 100 inhabitants back in 2018. This data allows us to assume that the majority of telework, especially in the developing economies, will be done using the mobile connection.

As a driver of this growth, the price of the mobile data has dropped significantly in the past years (from 37.5 USD in 2012 to 13.1 USD in 2019 which is equal to 5.7% of monthly GNI per capita in APEC and 1.3% respectively), while the price for the fixed broadband subscriptions remained relatively high as it is a prerogative of the developed markets³. In 2019 the average price for 5GB of data in APEC amounted to 29 USD (or 3.4% of monthly GNI per capita).



Source: ITU ICT Price Baskets database⁴

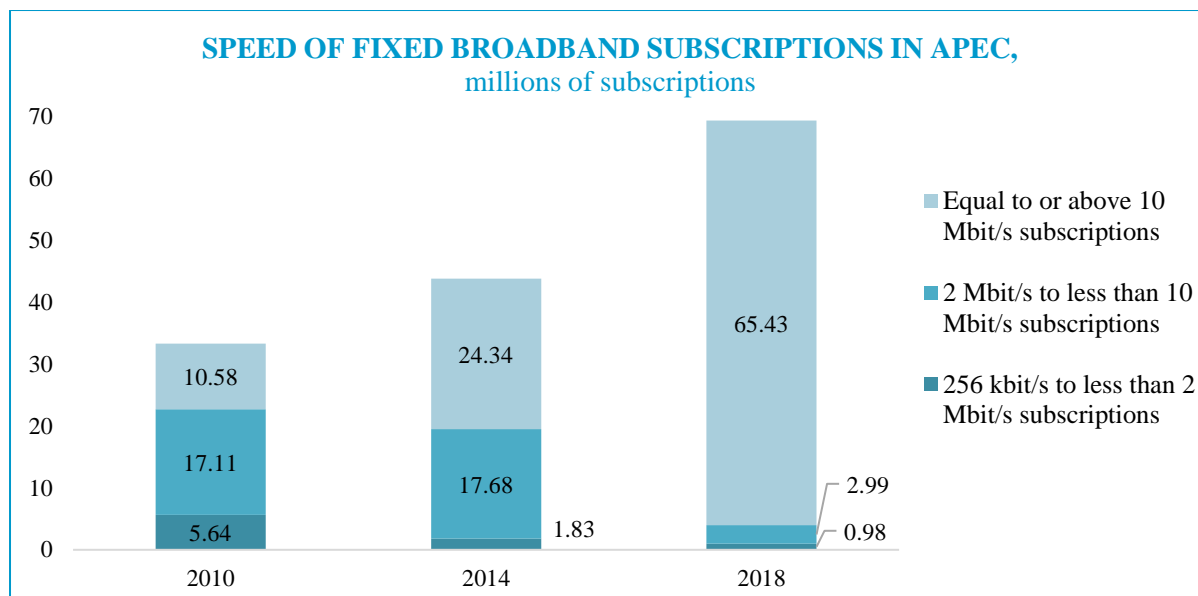
Although the price for the fixed broadband remained relatively high, its speed has improved significantly over the years. By 2019 most fixed broadband connections in APEC boast high-speed quality (10Mbit/s and higher speed) that allows smooth video calls and other forms of

² Per ITU recommendation “effective teledensity” indicator is used to ensure fair measurement of access to telephones among economies. For the indicator, the blend of fixed line subscriptions and mobile subscriptions is used – whichever is higher.

³ The analysis is done for the price of 1GB of data in 2012 for both mobile and fixed broadband, and for 1.5GB and 5GB of data for 2019 respectively, as this is the data available at ITU database. Some data is lacking for Chinese Taipei, Thailand, Singapore and Papua New Guinea.

⁴ For fixed broadband basket in 2010 and 2015 data referred to a monthly data usage of 1 GB. In 2019 it referred to a monthly data usage of 5 GB. For data-only mobile broadband in 2012 and 2015 data referred to a monthly data allowance of 1 GB, in 2019 – to a 1,5GB.

teleworking. Nevertheless, there is still some proportion of users that use lower speed connections.



ITU World Telecommunication/ICT Indicators database⁵

TRENDS & RISKS

- **Traditional infrastructure is still needed**

Many economies still have underdeveloped basic infrastructure that needs to be fixed before starting programs for accelerating new digital technologies. Economies will need to continue to invest in infrastructure such as in transport and energy. These investments will now have to reflect the changes in the broader economy as a result of the pandemic.

In **China** major efforts to catch up in infrastructure development were taken prior to pandemics. The Action Plan for Building a High Standard Market System was proposed to increase investment in new infrastructure (NI), focusing on promoting communications network infrastructure, new technological infrastructure and computing infrastructure. The whole NI plan is reliant on market forces and private investment. The following elements were seen as parts of NI: 1) R&D institutions, research infrastructure, and innovation-focused industrial parks 2) ICT infrastructure 3) 5G, Internet of Things, industrial internet, artificial intelligence, cloud computing, blockchain, data centers, and internet communication network infrastructure 4) Integrated infrastructure 5) Smart transportation and smart energy facilities.

⁵ Note data gaps for Brunei Darussalam, Indonesia, Korea, Papua New Guinea, Peru and the Philippines for this chart.

- **Insufficient digital infrastructure**

The analysis shows that the APEC economies are still far from full Internet coverage, while the average APEC Internet connection may hardly be characterized as high speed enough to enable smooth telecommuting or work from home. This poses the risk of digital infrastructure preparedness lagging behind the demand for flexible work arrangements (especially amidst the pandemic and the need to keep within strict social distancing measures). Governments therefore should invest in infrastructure development to build connectivity networks in both urban and rural areas, stimulating economies-wide fixed broadband coverage provided by wired, fiber-optic and wireless communication lines.

- **High price of staying online**

Another challenge APEC economies face is the relatively high average price of the Internet connection (especially if considered as the percentage of monthly GNI per capita), limiting the number of workers that can potentially benefit from a flexible work format. In this regard, governments may play a role either in subsidizing costs of using ICTs for particular groups of population or in building partnerships with Internet-providers so that the latter enhance Internet accessibility through their pricing policies.

ECONOMIES' SOLUTIONS

Australia The economy adopted the financial support package for Internet-providers to deliver services to customers living in rural areas, as well as micro, small and medium enterprises (MSMEs).

Brunei Darussalam In June 2020 the Government released the **Digital Economy Masterplan 2025**, which outlines strategies for becoming a Smart Nation with a digital and future-ready society, sustainable economy as well as robust digital infrastructure and ecosystem. Since the release of the Masterplan, mobile broadband subscriptions increased by over 35,000 subscribers; the number of fixed broadband subscriptions increased by 32 per cent; and bandwidth utilization increased by almost 52 per cent.

China In response to the pandemic, the Ministry of Industry and Information Technology initiated an emergency response mechanism and issued the **Notice on Facilitating Construction and Maintenance of Broadband Networks to Support Production Resumption**, which encouraged telecommunication providers to upgrade and expand network capacity, strengthen monitoring of network operation and provide timely installation and maintenance services.

Indonesia The economy developed an online resource “**Siap Tanggap**” (or simply SIAP) – a tool for the collection, management and analysis of geocoded local data

that would help with understanding the socio-economic impacts of COVID-19 and accelerate recovery.

Japan The economy is providing subsidies for increasing the coverage of broadband and mobile Internet. In addition, Japan subsidizes MSMEs expenses on improvement of ICT infrastructure, including the improvement of the remote work environment.

Korea In July 2020 the Korean authorities announced a **Korean New Deal** (new economy's strategy) to revive the economy by facilitating the convergence of new and old industries through enhanced use of digitalization. The New deal focuses on synergies between the government and the business sector, including collaboration on the improvement of data infrastructure, collection and usage of data, development of 5G network infrastructure and artificial intelligence technologies.

Mexico In the first half of the 2020 the economy adopted a comprehensive plan "CFE Telecomunicaciones e Internet para Todos" aimed at increasing the Internet speed as well as the quality and affordability of the telecommunications services, including through provision of non-profit telecommunications services, and development of computer and telecommunications systems, as well as other assets related to their development and support. The highlights of the program are the focus on the needs of the rural customers and active usage of the public-private partnership.

Philippines In order to mitigate the consequences of poor quality Internet connection, the economy developed **the Free Public Internet Access Program**. In addition, **the National Broadband Plan** provides the blueprint for the development of broadband infrastructure across the economy with fiber optic cables and wireless technologies.

Russia In 2018 the economy adopted the program **“Digital economy of the Russian Federation”**. The key goal is the development of a sustainable and secure ICT infrastructure in the economy suitable for the high-speed transmission, processing and storage of large amounts of data. The program aims at a three-fold increase in spending on the development of the digital economy (by share in GDP) compared to 2017. Moreover, during the COVID-19 pandemic the economy put emphasis on supporting domestic IT solutions for remote work, study, healthcare operations and other online services. Requirements for extra budgetary funding were lowered to support the industry.

Singapore The government provides up to 80% of the funding for pre-approved technology solutions that improve productivity (until 30 September 2021) for a wide range of sectors including IT, precision engineering, construction, landscaping industries, retail, and logistics. In addition, the economy provides the package to support enterprises in taking business online. For Retail enterprises expanding in the

local market up to 90% of the costs could be funded through the Singapore E-Commerce Programme. Retailers seeking to expand overseas can apply for the Multichannel E-Commerce Platform (MEP) Programme for a one-time support, covering 70% of the costs for a year.

Viet Nam Prime Minister Nguyen Xuan Phuc approved the **National Digital Transformation Program until 2025**. The program aims to promote network safety and security, develop digital government platforms, Internet of Things infrastructure, and strengthen cyberspace-related legislation. The three pillars of the National Digital Transformation Roadmap are e-government, e-economy and e-society.

III. REGULATORY PRACTICES ADOPTED IN APEC

[A number of studies](#) conducted in developed APEC economies show that about ¾ of the workers who had a chance to work remotely during the pandemic would like the option to work remotely for at least 1-2 days per week even after the lifting of the quarantine restrictions. Potential for such changes is enormous: about 20% of labor force [may work remotely](#) for 3-5 days per week without losses in productivity.

Mexico According to PwC Mexico, 67% of companies want to keep the remote work format after the pandemic (where applicable), 82% will make either working schedule or physical location of workers flexible.

China According to the study run by US-China Business Council before the pandemic (in 2014), the majority of companies interviewed allowed only two forms of flexible work arrangements: flexible working hours or telecommuting. The driving reasons for such provisions were traffic, air pollution, office rent, medical, job function, and calls. This practice was more common in the China-based offices of international companies and almost negligent in Chinese companies due to cultural norms. However, now after the pandemic around 21% of companies-respondents [plan to provide](#) the options of home/remote work format to employees.

The natural reaction of the economies to these emerging trends is the *update of the legislation* (expansion of social and labor benefits for those working remotely, setting labor safety and health standards for remote workers, providing the right to disconnect and freedom of movement, etc.).

TRENDS & RISKS

- **Tax payment cases becoming more complex**

Most world tax legislations regulate the cases of remote work. However, there are still a few cross-economy and cross-border instances, where additional legislation will be required. Moreover, with the spread of new work arrangements the tax payment cases in 2021 and beyond will be more complicated than in [previous years](#). Additional informational campaigns might be required from the tax authorities for the population (employers and employees) to increase awareness about the tax procedures for their remote work cases.

- **Compensation schemes include localization**

Companies offering long term flexible work options are starting to adjust compensation plans accordingly. Before the pandemic, the compensation was prorated in accordance with the location of the office. For example, employees of the same technological company, in similar positions, with similar skills and competencies, would have received different salaries if they were based in different offices. To keep the salaries

at the competitive level, companies had to adjust salaries in megacities with higher rents and prices. In the case of remote work, this presumption does not hold true anymore, as the employee of a megacity's office might be physically located in a place with cheaper prices.

To [adjust](#) compensation plans for this change, since 1 January 2021 Facebook has introduced the new system – the one of localized compensation. Similar changes are likely to take place in other companies and industries.

In the long term, these trends will become more apparent on the economy level and will require the governments to incorporate correspondent changes in the labor law.

- **International Labor Standards (ILS)**

There are no specific ILS developed yet on telework, but some standards (such as those on working time) may be applicable to working conditions (such as working hours, for example). There is still much work for the economies and international organizations to be done in developing such provisions. Particular issues to be addressed include: working hours, including overtime and compensation, Occupational Safety and Health (OSH), communication, training, legal and worker contracts, work-life balance and costs among others.

A separate issue that also needs to be addressed is the Right to Disconnect (RTD). RTD provides the employee an ability to disconnect from work when using ICT outside of the employer's workplace (now becoming a major concern for workers, employers and governments). RTD needed to avoid excessive hours and ensuring work-life balance.

- **Occupational Safety and Health (OSH) standards for remote workers need to be expanded**

Most economies have holistic standards for the benefits and guarantees for workers, including the issues of health and safety. However, these standards might not yet include the situations of [remote work](#), or include far less details compared to office work situations. The economies would need to issue or amend their labor law and standards to protect the population and ensure employers extend the benefits to remote workers.

- **Lack of trust among the top management towards remote workers**

The organizations with tight control and micromanagement culture find it difficult to recreate this management style in the situation of remote work. They are forced to either introduce additional control mechanisms, complicating their work, or to grant their employees more autonomy (e.g. evaluate employees' performance based on the results, not worked hours). Both options are associated with extra [costs](#). Governments may help change the working culture and make remote work a “new normal” by running informational campaigns among the population and business representatives.

ECONOMIES' SOLUTIONS

Regulatory practices adopted BEFORE THE PANDEMIC	Regulatory practices adopted DURING THE PANDEMIC
Australia	
<p>Fair Work Act 2009 (CWLTH) covers a range of flexible working arrangements, including telework.</p> <p>National Employment Standards (NES) entitle certain employees to ask for flexible working arrangements in case of personal circumstances.</p> <p>Work Health and Safety Act 2011.</p>	–
Brunei Darussalam	
<p>Employment Order 2009 is the main legislation governing the terms and conditions of employment in Brunei Darussalam. <i>(remote work not mentioned).</i></p>	–
Canada	
<p>Provisions under the Canada Labor Code. Since September 2019, employees in federally regulated workplaces with at least 6 months of service can request flexible work arrangements related to the number of hours worked per week, work schedule or work location.</p>	–
Chile	
<p>Labor and Employment Code. The document includes mechanism of remote working.</p> <p>Law 17322 on social security payment.</p>	<p>Remote Work Law (April 2020). It defines remote work as the provision of services totally or partially from home or any other place different from the company's premises and work provided or reported from those different places through technological tools.</p>
China	
<p>Labor law of the PRC (1994). According to the Labour Law, Integrated Working Hours System was allowed in certain sectors of the economy. It provided greater flexibility in working time to</p>	<p>Opinions on Stabilizing Employment Relationship and Supporting Employers' Resumption of Work and Production during the Period of Epidemic Prevention of New Coronavirus (2020). The document</p>

<p>employees by averaging their worked hours over a specified reference period (e.g. weeks, a month), as opposed to more generally adopted Standard Working Hours System.</p>	<p>stipulates that enterprises may arrange working from home for their employees.</p>
<p>Indonesia</p>	
<p>Manpower Act No. 13 (2003). Effectively homeworkers are excluded from the coverage of the Manpower Act due to the lack of consensus on the legal status of homeworkers as well as a general notion in Indonesia that the labor law is applicable only for workers in formal employment and not for workers in the informal economy. <i>(remote work not mentioned)</i></p>	<p>Indonesia is among economies with Regulatory Guidance or Associated Regulations for Workers on Telework (ILO).</p> <p>Circular Letter No. M / 3 / HK.04 / III / 2020 on worker / labor protection and business continuity for the prevention and control of COVID-19, which states that employers must continue paying full wages to employees who are working from home.</p> <p>Implementing regulations Law № 11 of 2020 on Job Creation (2021) – regulations on definite period employment agreements, outsourcing, working and resting hours and termination of employment.</p>
<p>Japan</p>	
<p>The Action Plan for the Realization of Work Style Reform (March 28, 2017). It promotes various styles of work, including employment-type telework, having side jobs and multiple jobs.</p> <p>Guidelines for the appropriate introduction and implementation of off-site work using information and communication technologies (February 22, 2018).</p> <p>Telework Security Guidelines (4th Edition, April 2018).</p>	<p>FY2020 Project on Telework Manager Consultation. Ministry of Internal Affairs and Communications of Japan provides information and consultations on systems suitable for telework, labor management practices and other telework-related matters through web conferences and telephone calls.</p> <p>Basic Policies for Novel Coronavirus Disease Control (Revised on May 25, 2020). Policies encourage shift to remote work through reduction of physical contact, aiming for a "70 percent reduction in employees coming to work."</p> <p><i>By March 2021</i></p>

	In order to create an environment where freelancers can work with peace of mind, clarify the application of related laws and regulations, and formulate effective and comprehensive guidelines.
Korea	
<p>Labor Standards Act The legislation in Korea allows workers and employers to agree scheduling flexible working hours during the day or week.</p> <p>“Regulations on the Application and Payment of Employment Creation Incentives and Employment Security Incentives” (revised in 2020).</p>	<p>Labor, Management and Government Declaration to Overcome Crisis Caused by Spread of COVID-19.</p> <p>Comprehensive and detailed guidelines (the “Manual”). The document defines "remote work" and how companies should manage their employees, who are working from home.</p>
Malaysia	
<p>The Employment act (1955) is the main legislation on labor matters in Malaysia. General labor law requirements and regulations (on working hours, labor conditions and equipment) also apply to working from home.</p> <p>The legislation in Malaysia permits averaging of working hours over a specified reference period (e.g. weeks, a month) in certain sectors of the economy.</p>	<p>Economic Stimulus Package – PENJANA and PRIHATIN.</p> <p>Circular No 360/2020 dated 21 Oct 2020 - “Work From Home” directive (“WFH Directive”) required certain employees in areas under the Conditional Movement Control Order (“CMCO”) to work from home.</p>
Mexico	
<p>Mexico's Federal Labor Law regulates all work conditions, employee rights and labor issues. Working hours in Mexico are following a specific standard that allows for flexibility in the workweek.</p>	<p>Federal Labor Law on Teleworking (in force since January 2021). The law regulates mainly the conditions, requirements and employees’ rights during teleworking. For the teleworking provisions to apply, more than 40% of the labor activity must take place at home or at another indicated place.</p> <p>Within the benefits of this teleworking reform is the recognition of workers' (both women and men) rights to: disconnect at the end of the workday; access social security; receive the necessary equipment and tools that allow them to telework, just like in-person workers; getting paid the proportional costs of electricity and internet services, as</p>

	<p>well as training to guarantee adaptation, learning, and adequate use of technologies, and the right to freedom of association and collective bargaining as teleworkers.</p> <p>The reform sets obligations for workers and employers: workers should take care of work equipment, and participate in monitoring mechanisms of their activities; meanwhile employers should provide social security for workers, safeguard workers' personal data, and promote communication mechanisms to ensure freedom of association and collective bargaining.</p>
New Zealand	
<p>Employment Relations Act (2000). Under part 6AA of the Act, all employees have the right to request a change in their working arrangements at any time. Employers have an obligation to respond to requests as soon as possible and not later than 1 month after receiving the request. There is a limited, but broad, number of reasons employers can decline a request, such as an inability to recruit additional staff or to reorganize work.</p>	<p>COVID-19 Public Health Response Act 2020 The lockdown measures and associated orders made in the Act ultimately compelled a lot of businesses to either stop work, or adopt flexible working where possible.</p> <p><i>(Flexible Working Arrangements Guide was published to inform the population on already existing regulations in an easier to digest form).</i></p>
Papua New Guinea	
<p>Employment and Labor Law. The document covers common issues in employment and labor laws and regulations – terms and conditions of employment, employee representation and industrial relations, discrimination, maternity and family leave rights. <i>(remote work not mentioned)</i></p>	–
Peru	
<p>Labor Legislation of Peru The legislation in Peru allows workers and employers to agree scheduling flexible working hours during the day or week. Legislative Decree №1405 (2018), Supreme Decree №002-2019-TR (2019).</p>	<p>Practical guidelines on teleworking regulate all the formal questions on teleworking, including health and security guarantees, working hours and rest time requirements, and provisions for additional work-related expenses.</p>

<p>The documents “establish annual leave regulations in order to favor the reconciliation between work and family life” as well as its regulations for the general private sector.</p>	
<p>Philippines</p>	
<p>Republic Act 11165 or The Telecommuting Act (2018). The Act encourages employers from the private sector to offer telework to their employees.</p> <p>Department Order no. 21-1990; Department Advisory nos. 02-2004 and 02-2009. The orders envision the compressed work week and telecommuting.</p>	<p>Guidelines on the Adoption of Flexible Work Arrangements as Remedial Measure due to the Ongoing Outbreak of Coronavirus Disease 2019 (COVID-19) - Labor Advisory No. 09 (supplemented by Labor Advisory No. 11). The document is issued to assist and guide employers and employees in the implementation of various flexible work arrangements (including telecommuting, work from home, reduction of workhours/workdays, rotation of workers, forced leave, worksharing).</p> <p>Guidelines on Employment Preservation Upon the Resumption of Business Operation - Labor Advisory No. 17. The guidelines cover health standards, work from home or telecommuting work arrangements, concrete work schemes as well as wages allocation requirements.</p> <p>Memorandum Circular No. 10 on Revised Interim Guidelines for Alternative Work Arrangements and Support Mechanisms for Workers in the Government During the period of Statement of National Emergency due to the COVID-19 Pandemic. The guidelines allow all government agencies and instrumentalities to adopt a menu of alternative work arrangements, and ensure that the agencies provide their workers with adequate support mechanisms (i.e. health and psychosocial interventions, personal protective equipment, and reasonable transportation and housing quarters, etc.).</p> <p>The MC No. 10 was amended October 2020</p>

	<p>to be consistent with the community quarantine rules issued by the Inter-Agency Task Force on the Management of Emerging Infections Diseases (IATF) and is now referred as MC No. 18.</p> <p>Interim guidelines on workplace prevention and control of COVID-19 of the Department of Trade and Industry and Department of Labor and Employment. The guidelines were issued to assist private institutions which were allowed to operate during the implementation of community quarantine in various parts of the economy, in consideration of the minimum health protocols and standards.</p> <p>Guidelines on Protecting Personal Data in a Work From Home Arrangement. The guidelines were developed based on Republic Act 11165 and cover general security measures that organizations and individuals working on their own can take when a telecommuting arrangement is implemented.</p>
Russia	
<p>Labor Code of the Russian Federation. In accordance with Russian labor legislation, an employee and an employer may agree on flexible working hours and other changes. The legislation in Russia permits averaging of working hours over a specified reference period (e.g. weeks, a month) in certain sectors of the economy.</p>	<p>Labor law "On the specifics of remote work", in force from Jan 1, 2021.The key changes are:</p> <ul style="list-style-type: none"> --Employers could combine an employment contract that contains a fixed place of work with a contract for temporary remote work (essentially, add provisions for remote work into the main contract). --Three types of remote work contracts: <ol style="list-style-type: none"> 1. Permanent remote work contracts; 2. Combined contracts where the period of remote work does not exceed six consecutive months; 3. Combined contracts where periods of remote work can be alternated with periods of fixed place work (e.g. office working).

	--New arrangements for documents signing, including e-signatures.
Singapore	
<p>Work-Life Grant (WLG) for flexible work arrangements (2018). The document aims to incentivize companies to sustain the use of flexible work arrangements for all employees, to create work-life harmony at the workplace.</p> <p>Flexible Work Arrangements (work timing/duration, work location, work scope), largely promoted since 2014, refer to work arrangements where employers and employees agree to a variation from the usual work arrangement. For example, flexibility can be applied to:</p> <ul style="list-style-type: none"> • Work timing/duration. • Work location (telecommuting, working from home and smart work centres or satellite offices). • Work scope (refers to varying duties or work load. An example is part-time work). 	<p>Alternative Arrangements for Meetings, COVID-19 (Temporary Measures) Act 2020. The Act codifies the stricter circuit breaker measures. The measures introduced under the Act include, among others, temporary measures for the conduct of meetings and further clarification on the alternative arrangements for meetings for the different types of entities.</p> <p>Tax Exemption for Employment Benefits for Accommodation, Food, Transport and Daily Necessities. Qualifying benefits that are eligible for the tax exemption: Cash allowance, reimbursement or benefits-in-kind for any of the following items for the employee's use/consumption in Singapore:</p> <ul style="list-style-type: none"> • accommodation (including the furniture and fittings provided together with the accommodation) • food, transport, and daily necessities ("basic necessities"). <p>Tax Exemption for Working Remotely from Singapore due to COVID-19 acts for those who have been exercising overseas employment but are now working remotely from Singapore due to travel restrictions caused by COVID-19.</p>
Chinese Taipei	
<p>Labor Standards Act. The 2018 amendments include mechanism of remote work.</p>	<p>Industrial Human Resource Investment Program established by the Workforce Development Agency, Ministry of Labor (<i>remote work not mentioned, the key focus is on human capital development</i>).</p>
Thailand	
<p>Labor protection Act (February 12, 1998; revised in 2019).</p>	<p>Companies must fully comply with the Personal Data Privacy Act (the “PDPA”)</p>

<p><i>(remote work not mentioned)</i></p> <p>The work from home policy is not directly and particularly stipulated in the <u>Labor protection act</u>. However, the employees working from home are covered by the same rights and guarantees as other employees.</p> <p>Personal Data Privacy Act (May 27, 2019).</p>	<p>from 27 May 2019. In the absence of government orders or regulations to the contrary, compliance with the PDPA should not be affected by the regulations in response to COVID-19 and companies must continue to prepare for full compliance.</p> <p>The Regulation on Entitlement to Compensatory Benefits in the Event of Unemployment due to the Force Majeure from the Pandemic of Dangerous Communicable Disease under relevant law relating to Communicable Diseases (2020) (the Force Majeure Regulation);</p> <p>The Regulation on Determination of the Amount of Contributions to the Social Security Funds (2020) (the SSF Contribution Regulation).</p>
<p>USA</p>	
<p>Telework Enhancement Act (2010). The first document that required federal agencies to establish telework policies for their employees.</p>	<p>OMB Memorandum M-20-13: At the onset of the COVID-19 pandemic, the Office of Management and Budget encouraged all Executive departments and agencies to offer maximum telework flexibilities to all telework-eligible employees</p> <p>U.S. Department of Labor’s Wage and Hour Division’s Field Assistance Bulletin 2020-5: The guidance clarified an employer’s obligation to track the number of hours of compensable work performed by employees who are teleworking or otherwise working away from premises controlled by their employers. If the employer knows or has reason to believe that an employee is performing work, the time must be counted as hours worked.</p>
<p>Viet Nam</p>	
<p>2016 National Program 844 “Support innovative Startup ecosystem in Viet Nam until 2025” sets the target of supporting around 1,000 startups and related</p>	<p>The program to accelerate the founding of startups in information technology and other high-tech businesses in a bid to boost the economy's growth potential as COVID-19 weighs on the economy.</p>

projects by 2020 (Prime Minister Decision No. 844/QĐ-TTg 18/05/2016)
(remote work not mentioned)

2019 Program “Make in Viet Nam” seeks to promote the technology industry in Viet Nam, including by establishing 100,000 tech firms by 2030 (Initiative of the Ministry of Information and Communications of Viet Nam).
(remote work not mentioned)

The program to support small and medium businesses in their digital transformation process, especially during the sensitive time of COVID-19 pandemic.

Remote work not mentioned in domestic programs. The key focus is on supporting the income of population and MSMEs

IV. DIGITAL UPSKILLING IN APEC

Digital upskilling of population has been the focus of many APEC governments and companies for at least several years before the pandemic. This stems from the dramatic changes in the nature of work, with automation and other trends of the Fourth Industrial Revolution disrupting the job market. [PwC's research](#) shows that one in three jobs is likely to be severely disrupted or to disappear in the next decade because of technological change. This could affect almost half of all low-skilled jobs and a third of semi-skilled jobs. [WEF](#) forecasts that the digitalization trend will create 150 million new tech jobs in the next five years, while many other traditional jobs will become “tech-enabled”. This means that the earlier economies start upskilling the workforce to prepare for the new opportunities, the milder the consequences of automatization-born job cuts would be.

According to projections made by [WEF](#), the ‘business case’ for the governments to start investing in upskilling of the workforce is quite straightforward. Failure to reskill someone whose job is disrupted due to the automatization may result in years of welfare payments as well as missed opportunities for taxation. For example, for the US economy it would make financial sense for the US government to invest US\$19.9 billion into reskilling 77% of all workers in disrupted jobs into a new job, as the cost-benefit balance of the effort would be positive.

These prospects have made the need for up- and reskilling efforts both urgent and evident both for employees and employers. A few economies and companies have already launched vast digital skilling programs. For instance, since 2015 Google has been delivering free workshops on digital and other skills to different groups of the population in the Asia-Pacific region (SME workers, students, entrepreneurs, teachers, unemployed, etc.) under the “Grow with Google” initiative umbrella. In 2020, the number of people trained by Google in the Asia Pacific region amounted to more than [50 million people](#), and [5 million people in the US](#) economy alone. The Grow with Google initiative is normally tailored in each economy to its specifics and conducted in partnership with local authorities, making sure it fits the economy’s digital transformation strategies.

The pandemic proved the need to speed up the roll out of such workshops as the economies appeared not ready for the mass digitalization of labor. According to a [survey](#) conducted in APEC, 45% of top managers believe that the labor markets in APEC are not well prepared to the effects of labor digitalization, including with respect to the digital skills of workers.

TRENDS & RISKS

- **Lack of digital skills**

The need to train employees when shifting to flexible work arrangements was the barrier for wide-scale adoption of ICT solutions even before the pandemic. During the pandemic the adoption of ICT was accelerated, though more often than not without the appropriate training for workers. If the existing gap in knowledge persists, security

issues and work inefficiencies stemming from the low skills level might have a negative impact on productivity in the long run.

ASEAN According to the estimates made by ERIA in 2019, only 56% of micro, small and medium enterprises (MSMEs) in ASEAN possess basic digital skills (using email, messengers and Microsoft Office), only 34% have intermediate digital skills that allow digital presence of the business (know how to use websites, social media, e-commerce platforms) and just 10% have advanced skills (using digital customer relationship management (CRM), digital analytics, big data, online banking services for business, etc.).

At the same time, developing these capabilities is crucial, as MSMEs are the backbone of ASEAN Member States economies – they constitute 95-99% of all enterprises and more than half of the employment.

- **Cybersecurity risks**

Users with basic level of digital skills are an easy target for cybercriminals, and with the accelerated usage of ICT by this category of users during the pandemic the number of cybercrimes grew as well. Moreover, the increased demand for remote collaboration technologies led to the appearance of applications and programs in the market that were developed too fast to pass necessary security checks.

According to the global cybersecurity company Kaspersky, phishing attacks demonstrated 600% spike during COVID, and more than 3.3 billion attacks on RDP (remote desktop protocol) was registered in 2020, a threefold increase compared to 2019.

Cybersecurity risks should be addressed by the economies on multiple levels, starting from basic public awareness and finishing with investments in growing national cybersecurity talents.

- **Inequality issues**

Both COVID-19 and the Fourth Industrial Revolution (4IR) impacts are not equal towards different groups of population. Youth, women, elderly and vulnerable groups of population might be more affected in their employability and social safety than others. If not thoroughly taken into consideration when designing support measures, the skills gap between these groups of population and the general audience might increase.

ASEAN In the Southeast Asia region people with best connectivity and digital skills tend to be men in metropolitan areas. Women and rural communities are disadvantaged (Sey 2021, The Asia Foundation 2020)

ECONOMIES' SOLUTIONS

Chile has launched the program "**Digitaliza tu PYME**" (**Digitalise your SME**). The program assists small and medium-sized enterprises (SMEs) to increase sales, lower costs and improve customer and supplier relations through digital technologies. The

instrument seeks to create awareness, deliver training and foster the adoption of different tools through several sub programs like: Pymes en línea (e-commerce), Despega mi MIPE (which helps micro and small businesses with social media tools, delivery and logistics, etc).

China has launched the **Action Plan to Digitalize MSMEs**. The Action Plan highlights the importance of new generation ICTs in supporting MSMEs during the pandemic. It has collected and pooled a batch of digital service providers, and recommended a variety of digital platforms, solutions, products and services for MSMEs. The Action Plan focuses on the following aspects: promoting digital upskilling programs, exploring new business models such as service-oriented manufacturing, using digital platforms to secure MSMEs' supply chain, and strengthening security of data sharing and information flow.

Malaysia has elaborated the **#SayaDigital programme** to equip Malaysians with digital skills and technologies. The project's aims are to accelerate the development of digital society and prepare the economy for the 4IR. The first two weeks of the programme focus on scaling digital adoption among businesses and the subsequent two weeks provide opportunities for Malaysians to learn and enhance digital skills.

Mexico has launched the website **"Together for Work"** that provides counseling and advocacy services, guides, tools and free online training courses for the wide range of users. In addition, in the wake of the COVID-19 pandemic, the Secretariat of Communications and Transportation of Mexico launched a series of cybersecurity guides to raise awareness on cybersecurity threats among users of telecommunications and broadcasting services and provide recommendations to safely navigate the digital world.

Philippines have launched the **Technology Empowerment for Education, Employment, Entrepreneurship, and Economic Development Program**. The program provides ICT-enabled services to communities with minimal or no access to digital and government services, especially to the vulnerable groups of the population. It aims to establish centers that serve as venues for ICT skills trainings as well as co-working spaces for online freelancers in rural areas. There are also diverse platforms for raising ICT awareness especially for MSMEs (**Online Program of the Technical Education and Skills Development Authority (TESDA), DigitalJobsPH program, CTRL+Biz program of the Department of Trade and Industry, the Productivity Toolbox of the National Wages and Productivity Commission**).

In addition, in 2020 the TESDA issued the Implementing Guidelines for Flexible Learning in technical vocational education and training TVET (TESDA Circular 62, series of 2020) to provide adequate support for trainees and re-skilling of workers

during the pandemic. In the coming periods, TESDA is expected to improve its online programs to include courses that will lead to Higher Order Thinking Skills (HOTS).

Singapore has set up the new **SG Digital Office (SDO)** to boost technology adoption as part of its COVID-19 economic recovery effort. To help promote inclusive access to digital tools and skills, including for older people, for stallholders in hawker centers and for small businesses, SDO recruited 1000 “digital ambassadors”. They focus on hawker centers and wet markets to encourage stallholders to adopt Singapore Quick Response (SGQR) code for e-payment. “Digital ambassadors” are also tasked with boosting the digital skills of 100,000 seniors by March 2021. Older citizens from lower-income households will be offered financial support for devices.

Korea has launched a **program to nurture 180,000 individuals** for future-oriented industries. Training will be provided through businesses, universities and institutions for innovation. Training on digital integration will be provided to 40,000 trainees in 2021 and 50,000 trainees a year starting from 2022. In addition, curriculum on new technologies will be taught to 10,000 university students in 40 campuses. Digitally based training platforms will be available to SMEs and training institutions through local co-training centers.

Viet Nam has launched the project "**Raising awareness, training skills and developing human resources for national digital transformation until 2025**" that has set the target of 1,000 digital transformation experts economy-wide by 2025. Accordingly, 15,000 staff in state agencies will be trained through short-term courses on digital transformation by 2025; 100% of provinces and cities will build digital transformation networks; 10,000 high-quality engineers and undergraduates will be trained on digital technology, digital economy and digital society.

V. RECOMMENDED MEASURES FOR APEC ECONOMIES

In order to maximize the positive effect from the shift towards flexible work arrangements and to minimize correspondent risks, the authors of this Report **recommend**, based on the received APEC responses, and current open source research, to:

- **Allocate or attract additional investment to support the shift towards remote work formats:**

- Investment in ICT infrastructure and provision of high-speed broadband Internet access all over the economy's territory.

Australia has established an AU\$150 million [financial relief package](#) to help the Internet providers support their customers affected by the COVID-19 pandemic (April – September 2020).

- Financial support to companies establishing or modernizing ICT infrastructure needed for remote work.

Since 2018, **Singapore** is supporting flexible work arrangements under the Work-Life Grant, which provides assistance to companies offering flexible working conditions (flexible working hours, level of workload, in-office/off-office hours) in order to improve employees' work-life balance. The scope of the grant was expanded amidst the COVID-19 pandemic. S\$2000 are allocated per each employee working on flexible terms (Flexi-Work Arrangement, FWA). The maximum number of such workers is 35 per the company.

During the pandemic the requirements for the companies applying for the grant have been lowered (e.g. by the moment of applying, the worker should have 1 month of work experience, while previously the requirement was 6 months). Moreover, as a part of the economic support package adopted by the government, support for MSMEs will be provided under the Productivity Solutions Grant. About 80% of the costs of the equipment needed for the digitization of business processes could be covered by the Grant till December 31, 2020 (previously – about 70%).

- Investments in the human capital, development of skills for remote work, leadership and management courses. As an option, partnerships among different sectors allow to attract additional investment and develop sustainable initiatives.

“**Go Digital ASEAN**” initiative is a partnership between The Asia Foundation, Google.org and ASEAN (example of sustainable cooperation between an NGO, corporate and governmental sectors)

Malaysia has launched e-Latih, a learning aggregator platform which offers all Malaysians unlimited access to more than 200 free online courses to develop their digital skills and other digital-work related competences.

Also in **Malaysia** the Human Resources Development Fund (HRDF), an agency under the Ministry of Human Resources, has been driving the initiative with private sector, inciting companies to pay the levy to sponsor the development of competent Malaysian workforce since 2001. As of the end of 2020, over 33 thousand companies in Malaysia participated in the program. The number of employees trained among registered employers ranged between 24 to 25% throughout five years' worth of data (2015 – 2019).

In **Russia** the key private initiatives, devoted to digital upskilling of the population (for both beginners and advanced users), are led by Yandex Academy, Technologies and Data Academy of the Sberbank Corporate University, Data Culture Project of the Higher School of Economics.

- Sponsorship of R&D related to the digitization and shift towards remote work (e.g. Virtual Reality).
- **Adopt measures to eliminate cultural and regulatory barriers for the spread of flexible work arrangements:**
 - Promote the right for remote work at least for several hours a week or directly subsidize remote work to overcome cultural biases.
 - Sign bilateral tax agreements between the economies to ease the transborder work and the control over retirement savings and health insurance.
 - Run information campaigns to popularize remote work. In particular, adoption of flexible work formats by the civil servants may pave the path for private companies.

The demand for the remote work in **China** was almost absent before the pandemic due to cultural norms. In the current circumstances, the economy has set course for provision of technological solutions to companies, especially MSMEs that could facilitate remote work. Huawei is developing software and hardware integrative solutions for remote work, Alibaba and Tencent are offering complex consumer-to-business (C2B) solutions. Apart from this, China subsidizes online education for MSMEs and provides free of charge access to platforms with relevant online trainings.

- Eliminate regulatory hindrances for flexible work formats by updating the legislation.

Since 2018 **Russia** is implementing the program “Digital Economy of the Russian Federation”, which fosters the development of technologies and digital

infrastructure in the economy. One specific barrier that was removed as a part of the program is the physical paperwork and signatures, as e-signatures and electronic workflows were introduced to the public sector.

- **Adopt measures to mitigate the negative effects for the most vulnerable groups of population:**

- Develop targeted programs to support the vulnerable groups of population and expand social networks to those who might be negatively affected by the proliferation of flexible work formats.
- When working on the legislation and new measures, that promote the adoption of ICT, ensure that these measures would not unintendedly harm the employability of the vulnerable groups of population.

- **Adopt measures to promote cybersecurity:**

- Develop or update economy-wide standards for data privacy and security for the remote workers.
- Make security an integral part of ICT and Digital Economy Initiatives.

Singapore GoSecure [programme](#) is designed to support ICT SMEs to build up their cybersecurity capabilities and support the adoption of cybersecurity tools and services internally so that they can leverage these tools and services, as well as put in place safeguards and Security-by-design practices to improve the security posture of their products and solutions.

- Invest into the public cyber awareness initiatives.

US Cybersecurity & Infrastructure Security Agency has been running for 17 years [National Cybersecurity Awareness Month](#) to raise awareness about the importance of cybersecurity across general public, ensuring that all citizens have the resources to be safer and more secure online.

- Build pipeline for cybersecurity talents starting from school.

Russia As a part of the federal program “[Information Security](#)”, 3 times more specialists with university degrees in cybersecurity will graduate in 2024 (compared to 2018).

- **Adopt measures to ensure safe and decent work environment for teleworkers:**

- Develop and introduce economy-wide standards on work safety for remote workers (including workplace condition, communication channels, work and rest hours). Mitigate the risk of remote workers doing overtime work by introducing the right to disconnect – the right of the workers to reject the job-related calls and e-mails during the off hours.

- Mitigate the risk of teleworkers bearing the equipment expenditures by, for instance, introducing “stimulus premiums” for the employers who have teleworkers.
- Introduce regulatory frameworks to prevent violation of labor standards and agreements on salary payments in transborder remote work cases.

The Japanese “[Association of out-of-office workers](#)” has introduced the rulebook for effective organization of remote work. Many companies amend their internal codes of conduct using this rulebook. The key provisions cover recommendations for employers to teach employees with specific skills, standards of equipping workplaces, suggestions on time and modalities of remote workers’ activities, and approaches to assessment of remote work effectiveness. In 2018 the Ministry of Internal Affairs and Communications of Japan also published the [recommendations](#) on introducing the remote work model. By March 2021 the Japanese government will work out the guiding principles for enhancing legal protection and improvement of accident insurance mechanisms for freelancers in the context of promoting flexible work arrangements.

- Elaborate specific strategies on dealing with high rates of burnout and adverse mental health impacts reported among people working remotely during the pandemic, including the provision of mental health and psychosocial support (MHPSS) services to workers.

In the **Philippines** Department of Health partners with the World Health Organization (WHO) to raise awareness on the importance of public mental health, especially amidst the COVID-19 pandemic by launching a multi-sectoral approach for mental health with programs and interventions across a variety of settings (e.g. workplaces, schools, and communities) aimed at high-risk groups.

- Support the development of complementary infrastructure (e.g. in-home services, childcare services, delivery services).
- **Increase awareness of the private sector of international organizations recommendations.** For instance, [OECD recommendations](#) on using telework to increase productivity or [UNIDO recommendations](#) on the measures of responding to the crisis might be of interest to the corporate sector.

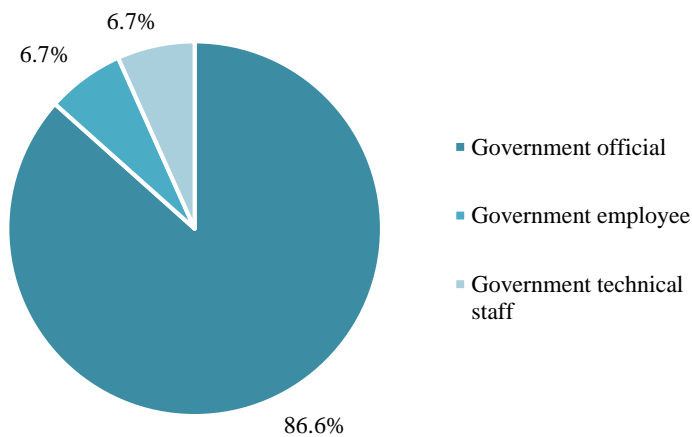
The ReWork project by **Google** gathers the best practices, researches and ideas on building flexible work culture. The project’s webpage contains [recommendations](#) on management training, team effectiveness evaluation, creation of innovative workplaces, employee training, etc.

Annex 1: Indicative results of the questionnaire⁶

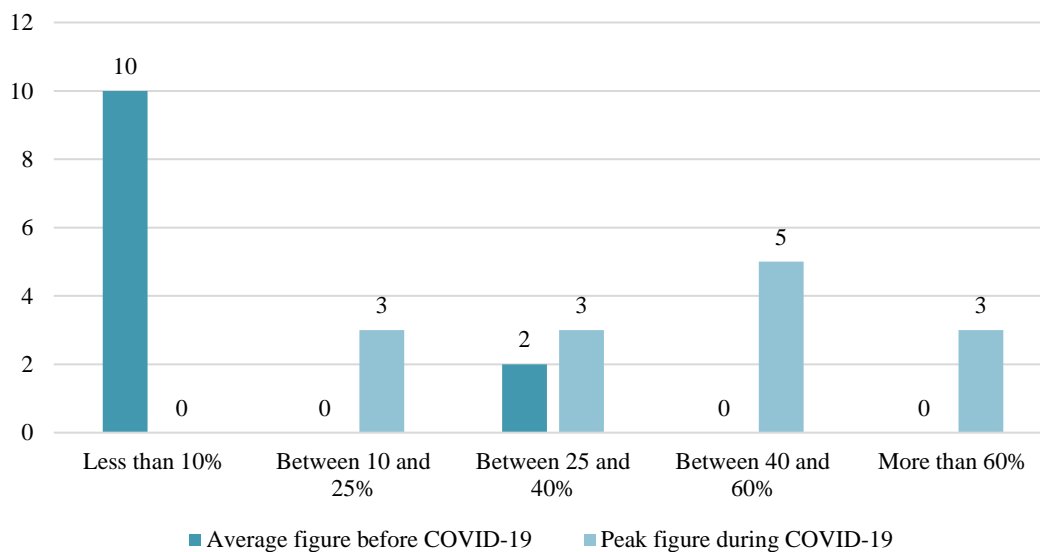
1. Please choose your economy

Answers received from: Malaysia (3), Mexico (3), Philippines (3), Chile (1), New Zealand (1), Russia (1), Chinese Taipei (1), Viet Nam (1), unknown (1)

2. Please mark the type of the respondent

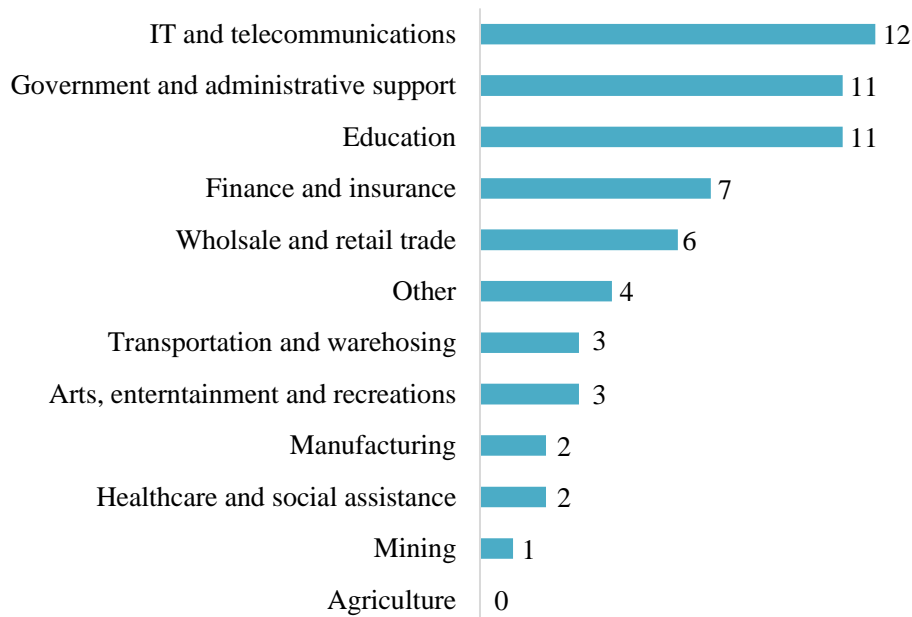


3. What was the share of workers in your economy that was occasionally using the remote form of work?



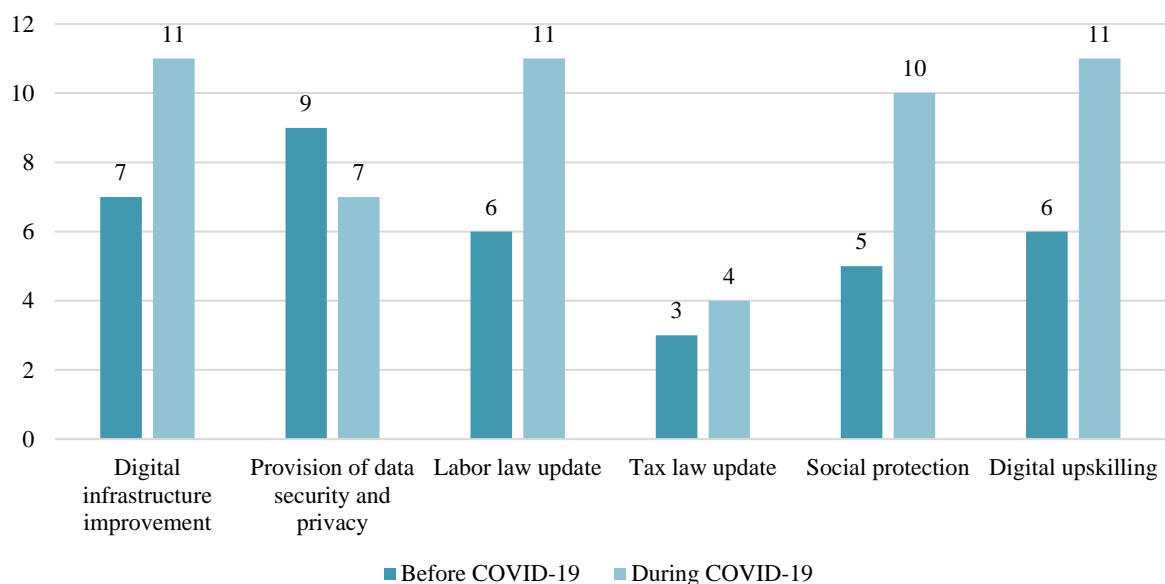
⁶ The survey was majorly aimed at demonstrating the general attitude of the EC members towards the issue rather than at reflecting the official positions only.

4. Which sectors in your economy are characterized by the highest share of remote workers?

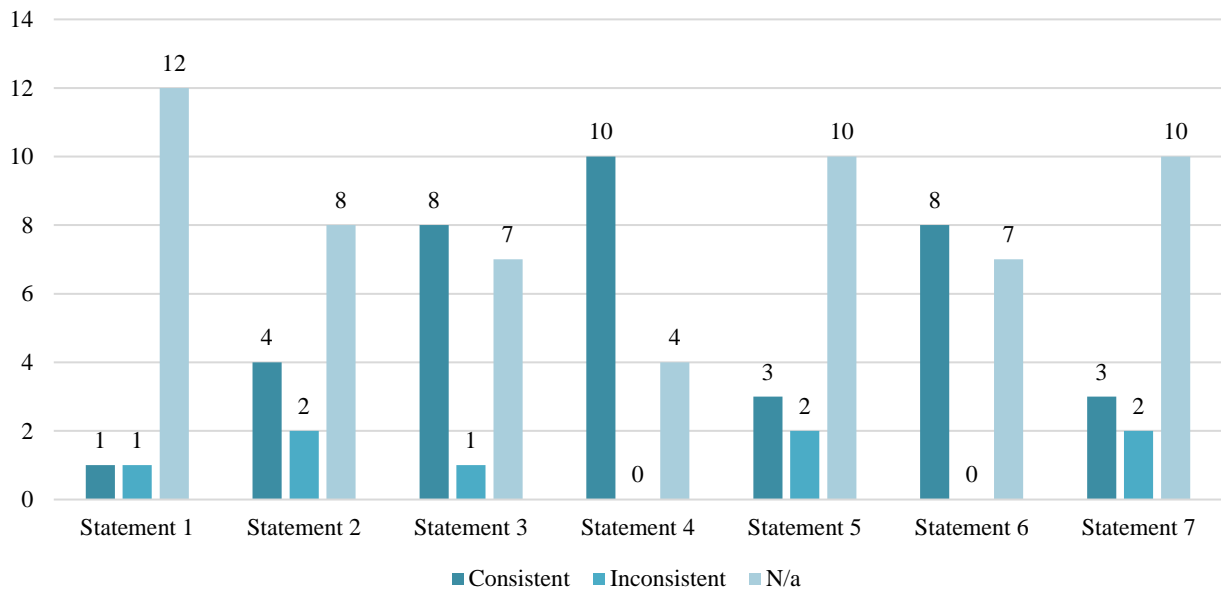


Other: Professional, Scientific and Technical, Admin & Support, Real Estate; Manufacturing including electric energy, water provision, gas distribution, construction; Business process outsourcing; Electricity and Gas Supply

5. Which policies / measures were taken by your economy to facilitate the adoption of flexible work arrangements?



6. Which of the trends revealed by OECD and ILO reflect the state of affairs in your economy?



Introduction of flexible work arrangements...

Statement 1: ... results in GDP increase

Statement 2: ... results in productivity / labor efficiency

Statement 3: ... results in population's and companies' cost saving

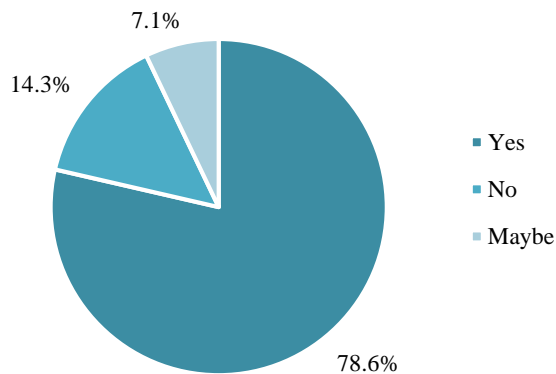
Statement 4: ... enables employment of people with untapped economic potential

Statement 5: ... leads to population outflow from mega- to smaller cities with lower living costs

Statement 6: ... stimulates innovation and creative thinking

Statement 7: ... helps to avoid the brain drain

7. Does your economy expect that the shift to the flexible work arrangements will be the ongoing trend after the pandemic?



Annex 2: Main international reports and studies

Artificial Intelligence and Labor Markets: friend or Foe // PACE Report. January 2019. URL: <https://pace.coe.int/pdf/42b1bebdcf551ca46f3fcd2895a3b0ceedaa32b53326667a8259ffe25682ae848428feba12/doc.%2015159.pdf>

Automation, Skills Use and Training // OECD. March 2018. URL: https://www.oecd-ilibrary.org/employment/automation-skills-use-and-training_2e2f4eea-en

Companies Implement Flexible Working Arrangements for White Collar Workers in China // Parker, J. 2014. URL: <https://www.uschina.org/companies-implement-flexible-working-arrangements-white-collar-workers-china>

COVID-19, 4IR and the Future of Work // APEC Policy Support Unit. Policy Brief № 34. June 2020. URL: <https://www.apec.org/Publications/2020/06/COVID-19-4IR-and-the-Future-of-Work>

Determinants and Impact of Automation // OECD. February 2019. URL: https://www.oecd-ilibrary.org/science-and-technology/determinants-and-impact-of-automation_ef425cb0-en

Exploring policy options on teleworking // OECD. November 2020. URL: https://www.oecd-ilibrary.org/urban-rural-and-regional-development/exploring-policy-options-on-teleworking_5738b561-en;jsessionid=DIBITvcHIZnlQI9OizQgT6-S.ip-10-240-5-82

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