Asia-Pacific
Economic Cooperation

Policy Recommendations:

Digital Permitting and E-Government Measures to Advance the Post-COVID-19 Economic Recovery

APEC Digital Economy Steering Group
April 2022

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Produced by
Implementing Digital Permitting & E-Government Measures to Advance the Post-COVID
Economic Recovery Project Team

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The Benefits of Digital Licensing & Permitting to APEC Economies

In-person, paper-based methods for business permit and license applications continue to dominate the government landscape across a majority of industries in the Asia Pacific. But inherent inefficiencies in the execution of paper-based application procedures result in projects and planned investments being delayed, sometimes for months, or even years, as they await necessary approvals. Such delays raise the costs of investment, but also represent lost employment, slower economic growth, and negatively affect economic competitiveness. In addition, offline payments for licensing and permitting (L&P) services and unlinked government databases have a tendency for leaks within the system, since fees are collected at various stages by different agencies. This increases opportunity for corruption.

Digitalizing government L&P services can lead to faster, more transparent, and less costly permitting processes, which, in turn, can improve employment rates, limit corruption, increase tax receipts for government, and accelerate broader economic growth:

- According to the World Bank, there are typically between 12 to 26 steps and milestones in e-permitting, depending on the digital maturity of the economy. With digitalization, the workload, and time and number of touchpoints required during the permitting process can be reduced by 30%. The 2020 World Bank *Doing Business Report* notes that it takes an average of 168 days to issue a permit. With an online, transparent process, this can be reduced to 114 days or less. The Republic of Korea, for instance, has managed to bring down the timeframe to less than 86 days.

- The Organisation for Economic Co-operation and Development (OECD) estimates that with centralized and traceable L&P processes aided by digitalization, government revenues from L&P issuance can increase between 25 to 30%.

- Studies show that efficient permitting leads to a 16.5% increase in property tax collection.

- A municipality in Latin America that launched an electronic business licensing and land use system experienced significant improvement in commercial licensing, with requests for bribes by municipal agents falling by 74% and those by third parties falling by 85%.

The onset of COVID-19 has exacerbated existing issues with traditional L&P processes. L&P has slowed even further, as economies that were too reliant on in-person and paper-based processes are now forced to institute social distancing policies, and government entities manage with less-than-full workforces. As of 1 May 2020, 61% of the 190 global economies that the World Bank tracks were no longer facilitating permit applications due to COVID-19.

On the other hand, the global pandemic has accelerated broader trends towards digital delivery of government services in a range of sectors, including in healthcare, retail, and education, among others. As economies emerge from the COVID-19 global stand-still, digitalization has taken on an additional dimension beyond efficiency and transparency. It has become a measure of an economy's resilience. It provides business continuity in an era of remote work, prevents paralysis of key regulatory processes due to COVID-19, and safeguards individuals. Governments that embraced digitalization were able to better deliver healthcare and services, meet citizens' needs, sustain remote work and enable businesses to operate, and better manage COVID-19 overall.

This report aims to provide foundational elements of an overall strategy that APEC economies can consider as they seek to digitalize their own L&P processes. They include suggestions for voluntary, APEC-wide initiatives that can serve as standards-setting measures, which will provide additional impetus for local governments to comply. Implementation of the recommendations will entail striking a balance between protecting investor and business data, and facilitating cross-jurisdiction data flows, new ways of re-organizing governance, and instituting a robust digital infrastructure.

Experts convened via the APEC project, Implementing Digital Permitting & E-Government Measures to Advance the Post-COVID-19 Economic Recovery: (a) discussed immediate, actionable recommendations for digitalizing L&P processes; (b) deliberated a voluntary region-wide certification process; and (c) shared case studies from the OECD; Chile; and Chinese Taipei that provide context-specific examples of digitalization.

Recommendations for APEC economies:

1. **DEFINE** and **DEVELOP** criteria for "holistic" digital licensing
2. **DEMONSTRATE** political will and leadership to digitalize L&P processes
3. **PROMOTE** an enabling regulatory and policy environment
4. **EDUCATE** public officials and build capacity among stakeholders
5. **DEVELOP** a regional certification model to aid implementation

Recommendation One:

Define and Develop Criteria for "Holistic" Digital Licensing

APEC economies should develop a harmonized, consensus definition for end-to-end, fully-digital L&P – and promote that definition as a regional best practice.

An APEC definition of "holistic" digital licensing is useful, so all economies have a common understanding of what it entails. This report, in consultation with experts engaged in this APEC initiative, offers that truly effective digital licensing is one that allows services to be transacted online throughout the entire process, from start to end. Exceptions may be necessary in specific circumstances when there is a need for in-person inspections – for example, during building construction – but the process should digitize and/or automate every procedure that does not require paper-based engagement, or in-person interaction.

The proposed criteria for holistic digital licensing are:

- Availability of information and rules online. Applicants should be able to access information about the permit application process online so there is consistency and transparency about requirements and steps involved.

- Ability to pay for, and renew permits online. Aside from convenience, online payments allow better tracking of cash flows across agencies and minimize opportunity for corruption. For instance, in the U.S., approximately 20-25% of emergency funds for Hurricane Katrina relief were lost without proper digital protocols and means to track them. When online tracking systems were instituted, this figure dropped to 2.3%. During the current pandemic, the ability to make payments online also safeguards individuals and public health officials, and aids business continuity.

- A single window to apply, process, and track permits. A single window only for the purpose of permit applications will simply translate online the same bottlenecks that exist in a paper-based process. One should also be cognizant that a single window is not just about eliminating physical visits to government agencies, but integrating data so individuals do not have to provide information the government already has, or input them multiple times during the permit application process. A central online information repository will address this issue.

  In some economies, like Canada, following the Westminster system, the central government does not have direct relationships with local governments. Establishing a centralized service/repository of information that can facilitate information sharing may therefore be more challenging.

- Online disclosure of any required mitigation. Larger investments, notably construction projects, require impact mitigation which is generally a negotiated process. This makes it fallible to corruption, and arbitrary decision-making. Disclosing mitigation online ensures transparency and accountability, and engenders trust in the system.

Recommendation Two:

Demonstrate Political Will and Leadership to Digitalize L&P Processes

Top-down leadership within governments of APEC member economies is necessary to transform antiquated processes.

Clear vision setting – whether through policy initiatives, legal reform, or simply messaging from executive leadership – will illustrate the benefits of digitalization, catalyze partnerships among stakeholders, and set the agenda for reform within government. This necessitates time, capacity, and commitment to eliminate excesses and corruption, and allocating financial and human resources for promotion of digital L&P.

Chile's Digital Transformation Law is an example of federal government promulgating policy to advance government digitalization. It lends legal heft to digitize, simplify, and eliminate in-person government processes in support of Chile's digital transformation strategy, which aims to improve public services for citizens and businesses, improve public policies, and prioritize digital transformation.

Recommendation Three:

Promote an Enabling Regulatory and Policy Environment

APEC economies should consider consistent and mutually-reinforcing policies directed towards the singular goal of digital L&P.

This comprises facilitative laws and regulations as well as government incentives to increase uptake of digital L&P processes, although as the World Bank notes, any design of these processes should be assessed on its utility from the perspective of users. Oftentimes, governments digitalize paper-based processes in their entirety, without efforts to simplify and streamline the L&P processes. This does little to help the ease of use of the digital medium and to encourage widescale adoption of the digital L&P process.

An enabling policy environment can include:

- Only accepting L&P applications online, although exceptions may have to be made stages to account for geography or other socio-economic considerations.

- Making it cheaper to apply for permits online compared to in-person.

- Providing certificates and awards for employees who have undertaken digital training.

- Introduction of facilitative regulations. Domestic laws do not always keep pace with digitalization and use of digital platforms, and may not provide adequate legal safeguards for personal information protection or for digital transactions. In economies with a federal system of governance, there may also be differing, or even conflicting regulations when conducting business or applying for permits across local government jurisdictions. Developing an institutional framework with a clear lead coordinating agency can solve this issue.

- Promoting inter-ministerial or inter-departmental collaboration and commitment throughout the user's permit application journey so there is consistency in approach across delivery of public services and focus on user-centric processes and procedures.

- Adopting international and/or regional standards as reference. This will provide further motivation for individual economies to implement similar standards/procedures domestically. For instance, over 100 economies and jurisdictions are signatories to the Common Reporting Standard, an information-gathering and reporting requirement for financial institutions against tax evasion. When the U.S. adopted its own early version of the anti-evasion standard and gave taxpayers a window for amnesty, the U.S. managed to raise approximately USD 10 billion, which would otherwise have been lost.

Recommendation Four:

Educate Public Officials and Build Capacity among Stakeholders

APEC economies should invest time and effort in engaging stakeholders and training the officials tasked with on-the-ground implementation.

Design of digital L&P processes that do not take into account stakeholder perspectives and motivations are unlikely to fare well. If there is no buy-in at various levels, including within the local government, and stakeholders do not see how they can gain from digitalization of services, implementation of digital L&P processes will be challenging. Rather than adopting a "doing business better" approach, the model needs to motivate and incentivize participation by a range of stakeholders, and create a virtuous cycle where each stakeholder pushes the other to adopt digital L&P best practices.

Underlying regulatory and policy initiatives, as well as incentives, has to be education and communication to stakeholders on how digitalization of L&P services will make their lives easier. This will include changing mindsets and culture, and articulating how innovative digital processes can contribute to saving time and money.

Recommendation Five:

Develop a Regional Certification Model to Aid Implementation

A certification framework, developed within APEC and with clear criteria, as well as incentives to promote adoption, could help accelerate implementation of digital L&P across the Asia-Pacific.

A voluntary regional certification model that marries elements on earlier recommendations above, with an incentive structure in a practical way forward. This is envisioned to take a building-block approach, where stakeholders receive recognition for digital implementation at different levels of sophistication. Such a model will reduce technical and financial barriers to implementation and make adoption of digital tools more manageable.
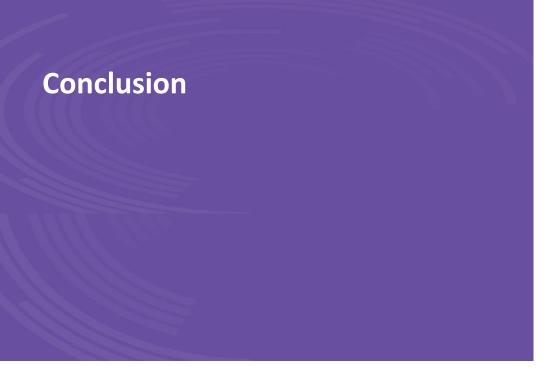
This report offers a suggested model that APEC economies can consider, and improve upon in **Diagram 1** *{page 10}.* Key questions policymakers need to consider are: (a) who the entity certifying an economy's standard of government digital services will be; and (b) the incentives for achieving higher levels of certification.

APEC is well-positioned to convene policymakers and stakeholders from member economies, as well as experts from the leading regional and global economic institutions, to develop such a certification framework that can be voluntarily adopted by APEC member economies.

Diagram 1:

A proposed model for APEC certification of digital L&P processes

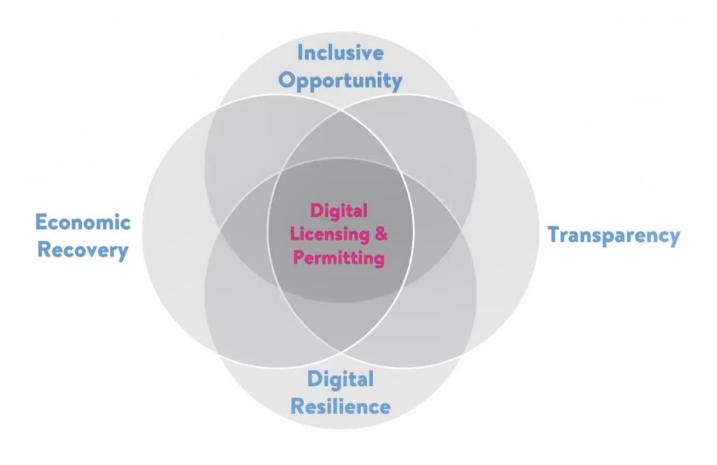| BEST PRACTICES	LEVELS OF CERTIFICATION		
	SILVER	**GOLD**	**PLATINUM**
1 *Rules are online*	Ensure that rules & regulations are **available online**	Ensure that rules & regulations are **available online**	Ensure that rules & regulations are **available online**
2 *Can pay and renew permits online*	Enable **online payment** of licenses and permits	Enable **online payment** of licenses and permits	Enable: • **Online payment** and • **Online renewal** of licenses and permits
3 *Digital Single window*	Enable **online applications** for licenses and permits	Enable: • **Online applications**, • **Online tracking**, and • **Online processing** of applications for licenses and permits	Enable: • **Online applications**, • **Online tracking**, and • **Online processing** of applications for licenses and permits
4 *Required mitigation is disclosed online*	Facilitate **mitigation requests** online	Facilitate **mitigation requests** online	Facilitate **mitigation requests** online
5 *Public servants are trained & certified*		Public servants are **trained** in digital permitting	Public servants are: • **Trained** and • **Certified** in digital permitting

Conclusion

COVID-19 has illustrated that governments cannot stick to the "old normal", but must quickly adopt new ways of delivering public services. This has accelerated governments' push to digitalize public services, including L&P processes. As highlighted by this report, digital L&P has the potential to accelerate investment, sustain economic growth, promote additional employment opportunities, and generate greater tax revenue.

But discussions on digitalization of government services cannot be examined in isolation. The World Bank notes that at least half of the world's population is not digitally connected, and economies have very different levels of data-driven economies. Moreover, there remain persistent, troublesome digital divides across gender and uneven distribution of digital skills. This increases the risk of disadvantaged and vulnerable groups falling further behind. Given this, policy dialogue within APEC economies should also incorporate important concepts such as rule of law, accountability, and digital inclusion so that digitalization does not extend existing inequalities and the digital divide even further. While the first two are linked to due diligence and process, the latter concept is linked to socio-economic considerations, such as equity and access.

Policymakers must also ensure there is an ecosystem of trust within the community, and that adequate measures are in place for accountability and transparency within the system. Inadequate transparency and insufficient regulatory improvement can hold back the private sector from making investments, while concerns about corruption and non-compliance may limit businesses' ability to integrate MSMEs into supply chains.

Diagram 2:

Digital L&P and its relation nexus with key societal concepts

The global pandemic has provided an opportunity for policymakers in APEC economies and beyond to re-design the delivery of public services in ways that will benefit their citizens and economies. Policymakers should consider the best practices and recommendations contained in this report as they seek to re-shape the way their governments operate. Political will, above all, is necessary for any digitalization initiative to succeed; but governments cannot accomplish this alone. Partnerships with the private sector and international organizations can help to bolster governments' existing capabilities and resources, and increase the odds of success.

Appendix: Case Studies

The following case studies outline digital L&P initiatives within multiple APEC economies, and at various stages of development, providing different perspectives in how municipalities and federal governments are implementing digital L&P processes. Key insights and learnings from the case studies have helped inform the policy recommendations for digital L&P contained in this report.

The OECD's Digital Window for Investment

The OECD's Digital Window for Investment (DWI) aims to create a one-stop, digitally native platform to facilitate end-to-end L&P necessary to establish corporate investment. The DWI simplifies and facilitates digital execution of all formalities, including those necessary for buying or selling of land, to enable construction and build-out of premises, and those required to start business operations. It is a voluntary program, with the OECD working to create "champions" – governments and agencies that adopt recommendations, best practices, and principles promoted by the OECD. These include: (a) simplification of regulations and digitalizing them from end-to-end; (b) a single source of contact; (c) a chained process of licenses and permits; and (d) electronic single filing. From the OECD's perspective, this end-to-end digital process constitutes "real digital licensing".

The OECD launched the DWI in Yucatan, Mexico in January 2021. The online platform currently facilitates a wide range of business-related services such as:

- Verification of the physical site the investment property will be situated at;

- Registration and regularization of property;

- Electronic signatures and online payments;

- Submission of information, management, and follow-up on government processes;

- Scheduling inspection or verification visits; and

- Obtaining corresponding permits, licenses and other authorizations.

Key performance indicators assessing Yucatan since the DWI's launch have shown marked improvements in response times in kickstarting business operations, construction processes, and selling/purchasing of properties. In general, data requirements are cut down by 56%, while response time has increased by 85%.

Diagram 3: *Breakdown of amount of data required, and response time before and after implementing the Digital Window for Investment in Yucatan*

Construction (aggregate licenses and permits)		Start of operations (aggregate licenses and permits)		Sell-purchase of properties
Data requirements	Response time (days)	Data requirements	Response time (days)	Response time (days)
120 / 61	556 / 90	130 / 50	424 / 84	111 / 10
-49%	-84%	-62%	-80%	-91%
Before / After	Before / After	Before / After	Before / After	Before / After

Source: OECD

Appendix: Case Studies

The successful implementation of the DWI in Yucatan depended on:

- Applying better regulations. This entailed simplification of requirements in order to reduce license application burden, and a mindset of re-engineering existing processes, without digitalizing them wholesale.

- Investment in hardware and software. This required prioritization, due to limited resources, but was not a major hurdle to implementation. The Government of the State of Yucatan procured all elements in-house, without the need for external contractors.

- Reform of laws. The Government of the State of Yucatan, with the help of the OECD, had to work through local congresses to ensure city laws were aligned with, and supported, the digitalization process.

- Intensive use of resources. In Yucatan, this mainly constituted human resources, involving time and coordination between government offices, but also financial resources for digital hardware.

- Political support. The OECD worked closely with the Yucatan Governor to drum up support for the project and mitigate political resistance from other quarters.

Chile's *Sistema Unificado de Permisos* (SUPER) Platform

The SUPER platform, launched in 2019, acts as a single entry point for investment projects' sectorial processes, where investors can register their companies and projects, and apply for, and follow, permit application processes online. The objective of the SUPER platform is to modernize the government apparatus for its citizens' benefit by: (a) providing information on government services; (b) making transparent the progress of permit / license application for investors; and (c) consolidating the myriad of different digitalization initiatives across agencies into one platform. Within the first two years of implementation, 74 permits from 18 institutions were integrated with SUPER, and 663 projects from 501 companies were registered through the platform.

The development of the platform was prompted by Chile's complex regulatory environment, which adversely affected investment. The World Economic Forum's Global Competitiveness Report 2017/2018 ranked bureaucratic inefficiency as a key disincentive to investment in Chile. The project approval process was plagued by:

- Complexity. There were more than 400 permits across more than 50 institutions and agencies required for project approval, and since a permit must usually be processed more than once during the development of a project, a single project might require thousands of procedures before it can begin operations.

- Lack of coordination. There was no communication between agencies processing applications and permits for the same project. At times, the same documentation was requested multiple times by different agencies.

Appendix: Case Studies

- Lack of digitalization and traceability. Most applications for permits had to be submitted in person and were paper-based. Of the 23 permits classified as most critical for project development by the National Productivity Commission, only 4 allowed their digital processing and 3 had operational and updated traceability mechanisms.

These led to various delays and lack of transparency. As a result, it could take as much as 4.5 years for a mining project, for example, to receive relevant permits - 2 years for environmental feasibility studies and another 2.5 years for relevant sectorial agencies to review the application, largely exceeding regulatory deadlines.

The key enabling factors for Chile's successful digitalization push were: (a) a clear diagnosis of the problem through a National Productivity Commission study, which determined the magnitude and impact of the issue; (b) financial support from international organizations, that incentivized digitalization; and (c) the 2019 Digital Transformation Law, that provided the regulatory and enforcement means for the digitization processes.

Chinese Taipei's Smart City Construction Management Project (SCCMP)

The SCCMP, initiated in 2009, aims to establish itself as an integrated (digitalized) building permit process with simplified and logical building code regulations by 2025.

Chinese Taipei has mapped out its Building Permit (BP) procedure into three stages, or "Building Information Modelling (BIM) Routes", according to quality, time, cost and level of digitalization. Each route sets variables to develop different scenarios and to optimise building permit routes for different users. The Taipei City Government is currently at "Route B," where the focus is on adoption of e-submission for permit procedures.

The ultimate objective is an integrated and digitalized building permit process with simplified and logical building code regulations that allow online application, e-submission of documents, recognizes e-signatures, and electronic review of the application.

Since its inception, paper waste from building permits has been reduced by 80%, and the time taken to review building permits has been reduced by 51.4%. In addition, digitalization has allowed the introduction of 24-hour e-submissions and processes for e-checking building permits.

Appendix: Case Studies

Table 1: *The Three Stages/Routes of the SCCMP*

BP Routes		Goals / Description	BIM Maturity Level
Route A	Traditional BP	**Goal: Paper Submission.** **Description:** The traditional BP submission in paper.	Level 1
Route B	Digital BP	**Goal: E-Submission.** **Description:** This route focuses on digital BP E-Submission rather than just E-Checking. But some experimental experience of E-Checking should be accumulated in this route.	Level 1 to 2
Route C	Integrated Digital BP	**Goal: E-Checking.** **Description:** This route focuses on Integrated BP E-Checking system development and discusses the possible replacement of the Joint Review or Administrative Review mechanisms. Consider suggesting the central government of Chinese Taipei, Construction and Planning Agency (CPAMI) to simplify these regulations of the building code.	Level 2 to 3

Three major factors might affect the SCCMP's success:

- Development of soft skills. Chinese Taipei mapped out the BIM in a staged way so architects can gradually improve their skills in relevant technologies and incorporate the BIM method as the primary working tool for building design, construction and maintenance in life cycle of building.

- Cost of architectural design fees. Currently, firms investing in BIM tools and expertise are, to a large extent, unable to pass on the additional cost to clients, especially for private sector projects. This may require a reallocation of resources, or factoring in the cost of these in project budgets.

- Improvement of building code and application procedures. Over-complicated building code regulations and permitting applications not only impede supervision and accountability, but also affect efficiency. Chinese Taipei's Construction and Planning Agency has plans to simplify these processes in order to reach the final stage of the SCCMP, a truly integrated building permitting process.

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No.	Economy / Organization	Name	Designation
1	**Canada**	Wai Fai Lee	Acting Director Innovation, Science and Economic Development Canada
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		Jason Scherpenisse	Coordinator Firms and Societies Registry Unit, Ministry of Economy, Development and Tourism
		Isidora Edwards	Advisor Ministry of Economy, Development and Tourism
3	**The Russian Federation**	Evgeniia Drozhashchikh	Deputy Head Asia Pacific Division, Department of Multilateral Economic Cooperation, Ministry of Economic Development
4	**Chinese Taipei**	Chung-Pi Luan	Deputy Director Construction and Planning Agency
		Meng-Chang Cheng	Associate Engineer and Subsection Chief Department of Urban Development, Taipei City Government
5	**Inter-American Development Bank**	José Luis Hernández Carrión	Senior Specialist Digital Government, Innovation in Citizen Services Division
		Rodrigo A. Contreras	Senior Consultant Integration & Trade Sector
6	**OAS**	Maryse Robert	Director Department of Economic Development
7	**OECD**	Manuel Flores Romero	Coordinator Programme on Regulatory Policy for Latin America
		Florentin Blanc	Senior Policy Analyst Regulatory Policy Division
8	**Transparency International**	Gary Kalman	Director Transparency International U.S. Office
9	**World Bank**	Zaki Khoury	Senior Digital Development Specialist
		Serene Ho	Senior Digital Development Specialist
10	**Walmart**	Welby Leaman	Senior Director Global Policy Strategy

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