

Chapter 2

SPECIAL FEATURE

Electronic services in tax administration

The level of tax revenues in an economy is influenced by tax policy and tax administration as well as the level of taxpayer compliance and government enforcement. Developments in information and communication technology (ICT) in recent decades, both for electronic filing and payment of taxes, have presented many opportunities for revenue bodies to increase government revenue, improve efficiency, and enhance the quality of services delivered to taxpayers, while at the same time reducing taxpayer compliance burden and government administration costs, and improving enforcement.

While the attention of revenue bodies was initially focused on the computerisation of routine tax administration processes (e.g. taxpayer registration and revenue accounting), the later part of the last decade and the early part of this decade saw most tax administrations tailoring their websites to provide transaction services as well as online forms and calculators for taxpayers. Initially many of the services concentrate on the electronic filing of tax returns for the major taxes and the electronic payment of taxes. Subsequently administrations adopted more two-way services including alerts and notifications. They also developed automated systems and processes for exchanging taxpayer data between businesses, government bodies and revenue bodies.

More recently administrations have developed:

- Systems that, subject to security safeguards, provide taxpayers with online access to their own taxpayer information (e.g. registration and accounting details);
- Mobile applications that allow taxpayers to undertake inquiries on their tax account and increasingly to be able to pay and file;
- Self-service options, especially utilising technologies that allow the provision of more personalised services and automated support.

2.1. Successfully harnessing ICT opportunities presents numerous challenges for revenue bodies

The leveraging of ICT for the modernisation of public administration and service delivery is receiving increased attention from governments and donor agencies. ICT enables governments to minimise the time, cost and resources to deliver taxpayer services, which has led to enhanced convenience, transparency and trust in the public service. Taxpayers no longer need to go to the tax office personally and wait to file their tax returns, or send mail. At the same time, some public sector ICT projects have received criticism for not delivering the desired results and for leading to unproductive investments without much improvement in the quality of service delivery.

Many factors have influenced the outcomes of ICT projects, including:

- Proper planning and prioritisation for ICT investments;
- Standardisation of work processes for project implementation;
- Instituting strong governance structures; and
- Applying staged implementation phases based on the likelihood of potential benefits.

The vast majority of economies in the Asian region reported having a formal plan or strategy for improving the range and quality of their electronic taxpayer services over the medium term (Table 2.1). The priority areas most frequently reported were the online filing of tax returns, online payment of taxes, enhanced websites that include more information and facilities (e.g. tax calculator), other online transactions, and integrated taxpayer accounts.

Table 2.1. **Strategic priorities for increased use of online services**

Economy	Type of electronic service							
	Online filing	Pre-filled returns	Online payment	Website service or tools	Integrated taxpayer accounts	Other online services	Enhanced data capture	Digital mailbox ¹
Brunei Darussalam	✓		✓	✓				✓
Cambodia	✓			✓		✓		
Hong Kong, China	✓	✓		✓		✓		
Indonesia	✓	✓	✓			✓	✓	
Japan	✓		✓	✓				
Korea	✓		✓		✓	✓		✓
Kyrgyzstan	✓		✓	✓	✓		✓	✓
Lao PDR								
Malaysia	✓	✓	✓	✓		✓		
Maldives	✓		✓	✓	✓	✓		
Mongolia	✓	✓	✓	✓				✓
Papua New Guinea	✓	✓	✓		✓		✓	
Philippines	✓		✓	✓	✓	✓	✓	✓
Singapore	✓	✓				✓	✓	✓
Tajikistan	✓							
Thailand	✓		✓	✓	✓		✓	

Notes: Lao PDR = Lao People's Democratic Republic. The absence of a tick mark means the type of service was not reported as a priority. 1. The digital mailbox is an e-mail support enabling taxpayers to seek clarification or guidance on Tax MIS application and services.

Sources: ADB (2016) and OECD (2015) survey responses.

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2.2. Use of electronic filing for key tax types

Electronic tax return filing systems are one of the most visible ITC-based services available to taxpayers. For many personal taxpayers, the submission of annual income tax returns is their most significant contact with the revenue agency, and a system enabling taxpayers to submit their tax returns electronically can be of benefit to both taxpayers and the government: taxpayers benefit from a simpler and more convenient system, reducing compliance effort and uncertainty and (in some cases) streamlining payment of taxes; while governments benefit from a reduced administrative burden that can be gained through the direct provision of taxpayer information in standardised electronic form, and increased compliance. Similarly, businesses can also benefit from electronic filing systems, in particular those that simplify compliance with the corporate income tax (CIT) and value-added tax (VAT) regimes and with those that facilitate withholding of employees' personal income taxes (PIT).

There are significant benefits from implementing well-designed and widely used systems of electronic filing:

- Reductions in taxpayers' compliance burden: Returns can be completed online, and taxpayers do not have to waste time obtaining paper returns and instructions. Similarly, refunds of overpaid taxes can be delivered more quickly than when paper documentation systems are used.

- Improved data quality: Many data items can be validated as they are input by taxpayers, meaning that the quality of data transmitted is of a higher standard.
- Reductions in revenue bodies' operational costs: Considerably fewer staff are required to process electronically filed returns.
- Improved overall management of the tax system: Taxpayer records can be updated more quickly, and management information can be more readily compiled and shared.

One of the significant innovations in tax return process design over the last two decades has been the development of pre-filled tax returns, primarily for personal income taxpayers. The pre-filled approach involves administrations "pre-populating" the taxpayer's return or online account with information it has collected from third parties. The pre-filled return can be reviewed by the taxpayer and either filed "on line" or in paper form. As the extent of pre-population is generally determined by the range of electronic data sources available to the administration, it is critical to this approach that the legislative framework provides extensive and timely third-party reporting covering all relevant taxpayer information.

Experience from many economies suggests that implementing systems of electronic filing can present many challenges for revenue bodies, particularly those with limited ICT experience. For example, there are times when agency staff are slow to adopt new technologies. Even after many years, the system's facilities may remain unused. This can be due to a lack of management buy-in before implementation, lack of involvement of staff in early trial runs, and a multi-layered decision-making structure leading to a lack of clear vision on the goals of the ICT programme. Such a failure creates doubts about ICT systems in the minds of staff and has a cascading effect on the implementation of future ICT programmes.

In addition, it can take several years to achieve substantial progress in their use by taxpayers. Generally speaking, revenue bodies in advanced economies in Asia (e.g. Japan, Korea and Singapore) have a relatively high percentage of tax returns filed electronically while developing countries continue to increase the percentage of electronic returns (Table 2.2). Increased use of online filing of tax returns is being achieved by a number of emerging and developing economies (e.g. Malaysia, Mongolia and Thailand). However, for many developing economies (e.g. Cambodia; Hong Kong, China; Kyrgyzstan; Papua New Guinea; the Philippines; and Tajikistan), either very limited progress has been made in this regard, or such services are yet to be offered.

Revenue bodies in most advanced economies have made substantial progress with the implementation of electronic filing for personal income taxes and corporate income taxes, although for many this has been achieved only after many years of promotion and refinement of the service offered. Revenue bodies in several developing economies have made rapid advances with electronic filing in recent years. For example, 83% of tax returns were filed electronically in Malaysia in 2013, up from 69% in 2011. Thailand's usage of electronic tax filing has increased from 10% to 75% for corporate income taxes between 2011 and 2013. Many revenue bodies have achieved success with electronic filing by mandating its use for larger businesses.

Use of electronic tax filing is still quite rare in most developing countries (e.g. Cambodia, Kyrgyzstan, the Maldives, Papua New Guinea, the Philippines and Tajikistan) and there is significant potential for them to make substantial progress. In the Maldives, the use of e-filing

began in December 2014. Its strategic priorities for the period 2015-19 include enabling online payment and filing for all taxes, and ensuring that at least 75% of tax returns are filed online and that 50% of payments are made online. Papua New Guinea began the use of electronic filing in 2014.

Table 2.2. **Rates of electronic tax filing for the major taxes, 2011 and 2013**

Economy	Percentage of total number of returns filed electronically					
	Personal income tax		Corporate income tax		Value-added tax	
	2011	2013	2011	2013	2011	2013
Brunei Darussalam	No PIT in place		..	51	No VAT in place	
Cambodia	0	0	0	0	0	0
Hong Kong, China	14	15	<1	<1	No VAT in place	
Indonesia	..	<1	..	5	..	57
Japan	44	50	58	64	53	63
Korea	87	91	97	98	79	83
Kyrgyzstan	<1	<1	3	8	37	1.5
Malaysia	69	83	49	76	No VAT in place	
Maldives	No PIT in place		0	0	0	0
Mongolia	..	..	76	80	96	92
Papua New Guinea	0	0	0	0	0	0
Philippines	<1	1	9	14	12	16
Singapore	96	97	63	69	100	100
Tajikistan	0	0	0	0	0	0
Thailand	45	34	10	75	14	69

Notes: PIT = personal income tax, VAT = value-added tax. “..” = data not available. Malaysia implemented a VAT in 2015.

Source: ADB (2016) and OECD (2015) survey responses.

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2.3. Using electronic payment methods for collecting taxes

The payment of taxes is another important interaction between taxpayers (particularly businesses) and revenue bodies, and one where the use of ICT can deliver significant benefits to taxpayers, revenue bodies, government, and the financial sector. For taxpayers, there can be significant costs in visiting a revenue office (or its agent such as a bank) during business hours to make a tax payment. Even paying by mailed cheques presents a fair compliance cost to the taxpayer. For payments made in either of these ways, there is also the cost of manually processing these payments, and there can be a time delay before a taxpayer's account is updated. On the other hand, payment methods that are fully electronic have been shown to be significantly less costly to administer, and typically enable quicker updating of taxpayers' accounts.

Historically, virtually all revenue bodies provided in-person payment services or promoted the use of mailed payments by cheque, referred to as non-electronic payment methods, due in part to the absence of alternatives (Table 2.3). However, over time with increased digitalisation, it became more cost effective for revenue bodies to use third parties such as banks to collect tax payments, with relevant payment data being transmitted by banks to the government electronically to enable them to update taxpayers' records. This is referred to as a partially electronic payment method. A more recent development is the fully electronic payment method, in which taxpayers make their own payments online (or arrange for this to be done automatically via their bank

with a direct-debit type of arrangement). Studies undertaken thus far clearly indicate that fully electronic payment methods are by far the most cost-effective means of collecting tax payments (OECD, 2010).

Table 2.3. **Tax payment methods available and volume usage, 2013**

Economy	Type of payment method and percentage share in total number of payments (where known)						
	Non-electronic		Partially electronic		Fully electronic		
	Mailed check	In-person at office	Agency payment	Phone banking	Internet	Direct debit	Payment kiosk
Brunei Darussalam	✓	✓	✓		✓	✓	
Cambodia		✓	✓				
China, People's Rep. of	✓	✓	✓	✓	✓	✓	
Hong Kong, China	✓ (6)		✓ (38)	✓ (17)	✓ (31)		✓ (8)
Indonesia			✓		✓		
Japan			✓ (75)		✓ (2)	✓ (15)	
Korea		✓ (5)	✓ (60)	✓ (<1)	✓ (25)	✓ (4)	✓ (6)
Kyrgyzstan		✓	✓			✓	✓
Malaysia	✓	✓ (51)	✓ (43)	✓	✓ (6)	✓	✓
Maldives		✓ (100)					
Mongolia			✓	✓	✓	✓	
Papua New Guinea	✓ (20)	✓ (70)			✓ (5)	✓ (5)	
Philippines		✓ (<1)	✓ (93)		✓ (7)		
Singapore	✓ (12)	✓ (7)		(10)	✓ (50)	✓ (17)	✓ (5)
Tajikistan	..	..	..	..	..	..	..
Thailand		✓ (70)	✓ (<1)		✓ (29)		

Notes: “..” = data not available. The absence of a tick mark means method is not available. Information for Mongolia refers to 2014 except for the partially electronic agency payment.

Sources: ADB (2016) and OECD (2015) survey responses.

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While many economies report the use of a comprehensive suite of electronic and non-electronic payment methods, many do not have statistics on the use of these tools, limiting their understanding and knowledge of taxpayer practices and the costs and value of their respective methods. A list of useful statistics may include:

- Total number of registration applications received on line (% of total registered taxpayers);
- Number of filings made on line (% of total transactions);
- Number of tax payments made at banks (% of total transactions);
- Number of tax payments made on line (% of total transactions);
- Total number of appeals submitted on line (% of total appeals); and
- Total number of tax filings made on line by large taxpayer units (% of total large taxpayers), etc.

Around half of revenue bodies surveyed reported the use of in-person at-office payment methods in 2013 which, as already indicated, are generally the costliest payment methods used for collecting taxes. For a few economies, the reported volumes of such payments were relatively high at 51% (Malaysia), 100% (Maldives), 70% (Papua New Guinea), and 70% (Thailand). Very high rate of use of fully electronic methods was reported by Singapore at 50% in 2013.

The Maldives and Mongolia both reported that new online payment services were implemented in 2014 or 2015, while Papua New Guinea reported that more taxpayers made direct debit payments in 2014 and 2015 than previously.

2.4. Progress of electronic tax services in Southeast Asian countries and Kazakhstan

Since 2000, Southeast Asian countries have undertaken a number of steps to improve the provision and capability of ICT services for tax filing and payments. Several developments are reported in this section.

Indonesia started to advocate a more intensive use of information technology in 2002 as part of its efforts to reform the Directorate General of Taxation (DGT) with support from international donors such as the World Bank. This reform has led to an updating of administrative processes, including the introduction of electronic filing and registration, and risk analysis. The amount of time required to pay taxes has been cut by more than half, from 560 hours in 2006 to 266 hours in 2011 since DGT introduced electronic tax services (World Bank, 2012).

A more recent project related to promoting electronic tax services was started in 2011 as the DGT developed Modul Penerimaan Negara Generasi 2 (MPN-G2, or Second Generation State Revenue Module) to improve the efficiency of state revenue administration. MPN-G2 included a number of new features, such as allowing payment of all taxes, accommodating payments in US dollars, and allowing tax payments to be made via automated teller machine or internet banking with a unique e-Billing ID generated online (KPMG, 2016). After years of piloting in selected banks and regions in Indonesia, DGT formally introduced MPN-G2 nationwide in January 2016 and made its use mandatory for all tax payments after June 2016. The web-based MPN-G2 is simple to use and can be accessed on any device that has internet connection, including tablets and smart phones, without installing additional software. However, there are a number of challenges that remain to be addressed, including a compatibility issue with some devices, technical problems such as bugs when using the website and poor ICT infrastructure and internet connections in Indonesia, especially outside of Java, which could cause frustrations for taxpayers (KPMG, 2016).

In **Malaysia**, the Inland Revenue Board (IRB) of Malaysia started an initiative to implement an electronic system for filing and paying taxes to promote paperless transactions in 2004 (World Bank, 2013). The new system allows taxpayers to complete tax forms and provide required payment details on line. This comprehensive system now consists of ByrHASiL, which allows online payment of income tax through appointed banks; e-Daftar, which allows online income tax file registration by new taxpayers; e-Filing, which allows electronic filing and submission of income tax return forms; e-Kemaskini, which facilitates information updates by taxpayers; and other online services that offer assistance to corporate taxpayers.

During the implementation of this new electronic system, Malaysia faced many challenges. For example, many taxpayers were reluctant to abandon the traditional paper-based process due to uncertainty about the security and privacy of information. The server was slow and often failed so taxpayers willing to try the new technology were discouraged. In order to address these problems, IRB applied several upgrades to the system and spent significant efforts advertising and promoting the safety and ease of its usage. Incentives have been offered for taxpayers using the electronic system, such as deadline extensions for tax filing, lower penalties for late submissions of tax returns, and more speedy refunds of excess taxes. As a result, the share of individuals and companies filing electronically has increased from 5% in 2006 to 34% in 2011 while tax compliance time has reduced from 190 hours in 2004 to 133 hours in 2010 (World Bank, 2013).

The Bureau of Internal Revenue (BIR) of the **Philippines** developed and introduced the Electronic Filing and Payment System (eFPS) in 2001, to simplify the tax processing in accordance with the Electronic Commerce Act passed in 2000. The electronic system aims to provide high quality and convenient service by achieving faster processing and immediate confirmation of the filing of tax returns. Unlike the traditional paper-based system where taxpayers have to manually file tax returns to various revenue district offices scattered across the country, eFPS allows users to directly fill in and submit their taxes on line through the BIR website. The system also helps BIR to gather tax related data in a faster and more reliable way.

However, despite the growing popularity of the internet, few taxpayers are using the electronic filing and payment system. BIR noted that only 3% of taxpayers submitted their payments on line in 2014. This is partly due to lack of awareness about the service and partly due to problems with the system itself. The biggest problem with eFPS is its unreliability as a result of numerous technical problems and limited system availability since its launch. Some of these technical problems could be very costly. For example, the malfunction of eFPS caused a domestic company, Maersk Filipinas, to submit its withholding taxes payment three times in 2002. The subsequent lawsuit to reclaim the overpaid taxes took five years (Rafal, 2012). In order to increase use of the system, BIR has passed regulations that mandate the use of the electronic tax system for certain taxpayers in 2015 while penalties will be imposed for non-compliance.

Singapore was one of the first countries in Asia to adopt an electronic system in public administration. Electronic tax services in Singapore are relatively well developed compared to other countries in the region. The share of small companies using e-Filing has grown steadily from 22% in 2012 to 41% in 2014 (IRAS, 2015).

The Inland Revenue Authority of Singapore (IRAS) was created in 1992 to administer taxes and start developing an integrated and computerised system for tax administration. IRAS first introduced an imaging system to electronically process the paper-based returns filed by citizens which lowered the time needed to issue tax assessments from 12-18 months to 3-5 months (World Bank, 2000). Direct electronic filing through internet was introduced in 1998. While only small companies could file their tax returns electronically in the past, IRAS announced the extension of E-filing to all companies regardless of firm size in 2015.

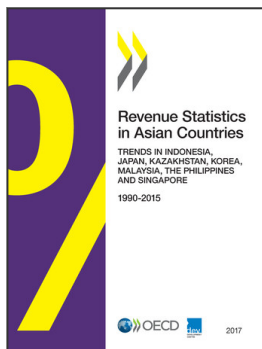
In addition to submitting returns electronically, taxpayers can also pay taxes electronically. A 12-month interest-free instalment plan (based on the previous year's tax assessment) is offered, under which tax is deducted directly from bank accounts. Changes in tax liabilities automatically lead to adjustments in payments. Alternatively, taxpayers can pay a lump sum once their current liability is assessed through direct deduction, by phone or internet banking services, or by debit card at payment kiosks or taxpayer service centres.

In **Kazakhstan**, the State Revenue Committee (SRC) is a department of the Ministry of Finance, which carries out regulatory, trade and control functions for the completeness and accuracy of tax receipts, customs and other payments into the budget, tax computations, etc. The SRC provides individuals and legal entities with 48 state services, including 29 tax services and 19 customs services. In order to improve services provided to beneficiaries, SRC continuously works on translating public services into electronic format. To date, 32 out of 48 public services (or 66.6%) have been automated, including 28 through the e-government portal. One of the most popular electronic services provided by SRC is the receipt of tax

reports. The share of tax reporting submitted electronically for 2016 was 95%. According to a new policy, all VAT payers were supposed to switch to electronic VAT invoices on 1 January 2017. The implementation has been postponed to 2018 for 300 largest taxpayers and to 2019 for all other VAT payers as the government aims for a smoother transition.

References

- ADB (2016), *A Comparative Analysis of Tax Administration in Asia and the Pacific*, ADB Tax Administration Survey, Asian Development Bank, Manila, <https://www.adb.org/sites/default/files/publication/193541/tax-admin-asia-pacific-2016.pdf>.
- IRAS (2015), "Corporate Tax Season 2015: IRAS Extends Convenience of e-Filing to All Companies", Inland Revenue Authority of Singapore, <https://www.iras.gov.sg/irashome/News-and-Events/Newsroom/Media-Releases-and-Speeches/Media-Releases/2015/Corporate-Tax-Season-2015--IRAS-Extends-Convenience-of-e-Filing-to-All-Companies/>.
- KPMG (2016), "Tax News Flash: New Electronic Tax Payment System Requirements", <https://assets.kpmg.com/content/dam/kpmg/pdf/2016/06/id-kai-tax-news-flash-january-2016-electronic-tax-payment.pdf>.
- OECD (2015), *Tax Administration 2015: Comparative Information on OECD and Other Advanced and Emerging Economies*, OECD Publishing, Paris, http://dx.doi.org/10.1787/tax_admin-2015-en.
- OECD (2010), *Survey of Trends and Developments in the Use of Electronic Services for Taxpayer Service Delivery*, OECD Forum on Tax Administration, Paris, www.oecd.org/tax/administration/45035933.pdf.
- Rafal, C.L. (2012), "A Look at the BIR'S EFPS", *AUSL Tech & Law*, 26 September, <https://ausltechlaw.wordpress.com/2012/09/26/rafal-cherry-liez-a-look-at-the-birs-efps/>.
- World Bank (2013), *Doing Business 2014: Understanding Regulations for Small and Medium-Sized Enterprises*, World Bank, Washington, DC.
- World Bank (2012), *Doing Business in Indonesia*, World Bank, Washington, DC.
- World Bank (2000), *Improving Taxpayer Service and Facilitating Compliance in Singapore*, World Bank, Washington, DC.



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