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The Taxation of the Digital Economy in Practice: Digital Services Taxes and Other Measures

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RESEARCH PAPER

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SOUTH CENTRE & WEST AFRICAN TAX ADMINISTRATION FORUM

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NOTE

The views contained in this paper are attributable to the authors and do not represent the institutional views of the South Centre, the West African Tax Administration Forum (WATAF) or its Member States. Any mistake or omission in this study is the sole responsibility of the authors.

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SOUTH CENTRE

In August 1995, the South Centre was established as a permanent intergovernmental organization. It is composed of and accountable to developing country Member States. It conducts policy-oriented research on key policy development issues and supports developing countries to effectively participate in international negotiating processes that are relevant to the achievement of the Sustainable Development Goals (SDGs). The Centre also provides technical assistance and capacity building in areas covered by its work program. On the understanding that achieving the SDGs, particularly poverty eradication, requires national policies and an international regime that supports and does not undermine development efforts, the Centre promotes the unity of the South while recognizing the diversity of national interests and priorities.

West African Tax Administration Forum

The West African Tax Administration Forum (WATAF) was established through the adoption of an Agreement by the General Assembly of Member States with the aim of enhancing the effectiveness of tax administration and advancing public service delivery to support the development efforts of countries in the West African region. The inaugural meeting of WATAF took place in Abuja, Nigeria on September 12, 2011, marking the official commencement of its operations.

Membership to WATAF is open to all countries within the Economic Community of West African States (ECOWAS), allowing for regional collaboration and cooperation in tax matters. WATAF comprises Tax Administrations from all 15 West African countries - Benin, Burkina-Faso, Cabo-Verde, Cote D'Ivoire, Ghana, Guinea, Guinea-Bissau, Liberia, Mali, Niger, Nigeria, Senegal, Sierra Leone, The Gambia, and Togo.

WATAF mission is to provide a platform to encourage strong collaboration amongst all ECOWAS Member States towards the improvement of the quality of tax administration in the respective States. Its vision is to promote effective and efficient tax administration in Member States in West Africa.

ABSTRACT

Digital businesses continue to grow and generate substantial revenue in market jurisdictions without maintaining a physical presence. They mainly rely on intangibles, user data and user engagement. International tax rules have not kept pace with these developments, leaving many jurisdictions unable to tax digital economic activity effectively. In response, countries have introduced national measures, such as Digital Services Taxes (DSTs), equalisation levies, and Significant Economic Presence (SEP) taxes, while continuing to engage in multilateral efforts. This paper examines how countries have implemented such measures. The study applies structured case studies of Colombia, India, Kenya, Nepal, Nigeria, and Tanzania. It analyzes the countries' legal frameworks, administrative practices, and revenue outcomes, while also identifying shared features and key differences in implementation approaches. The paper explores the conceptual foundations and theoretical justifications for taxing digital revenues at source, highlighting the limitations of current profit allocation rules that overlook the role of the market. Drawing from these country experiences, the study develops a peer learning framework based on emerging best practices while recognizing the challenges in implementation. The study then proposes pathways for harmonizing digital tax measures and outlines essential design elements to inform the development of the early protocol on the taxation of cross border services (which includes digital services) under the United Nations Framework Convention on International Tax Cooperation.

Les entreprises numériques continuent de croître et de générer des revenus substantiels dans les juridictions de marché sans maintenir une présence physique. Elles s'appuient principalement sur des actifs incorporels, les données des utilisateurs et l'engagement des utilisateurs. Les règles fiscales internationales n'ont pas suivi le rythme de ces développements, laissant de nombreuses juridictions dans l'incapacité de taxer efficacement l'activité économique numérique. En réponse, plusieurs pays ont introduit des mesures nationales, telles que les taxes sur les services numériques (TSN), les prélèvements d'égalisation et les impôts sur la présence économique significative (PES), tout en continuant à participer à des efforts multilatéraux. Le présent document examine la manière dont les pays ont mis en œuvre ces mesures. L'étude s'appuie sur des études de cas structurées concernant la Colombie, l'Inde, le Kenya, le Népal, le Nigéria et la Tanzanie. Elle analyse les cadres juridiques, les pratiques administratives et les résultats en matière de recettes de ces pays, tout en identifiant les caractéristiques communes et les principales différences dans les approches de mise en œuvre. Le document explore les fondements conceptuels et les justifications théoriques de l'imposition des revenus numériques à la source, en soulignant les limites des règles actuelles de répartition des bénéfices qui négligent le rôle du marché. S'appuyant sur les expériences de ces pays, l'étude développe un cadre d'apprentissage entre pairs basé sur les meilleures pratiques émergentes, tout en reconnaissant les défis liés à la mise en œuvre. Enfin, elle propose des voies pour harmoniser les mesures fiscales numériques et décrit les éléments essentiels à prendre en compte pour élaborer le protocole préliminaire sur la fiscalité des services transfrontières (y compris les services numériques) dans le cadre de la Convention-cadre des Nations Unies sur la coopération internationale en matière fiscale.

Las empresas digitales siguen creciendo y generando ingresos sustanciales en jurisdicciones de mercado sin mantener una presencia física. Dependen principalmente de los activos intangibles, los datos de usuarios y la interacción de los usuarios. Las normas fiscales internacionales no han seguido el ritmo de estos avances, lo que ha dejado a muchas jurisdicciones sin la capacidad de gravar eficazmente la actividad económica digital. En respuesta, varios países han introducido medidas nacionales, como los Impuestos sobre

Servicios Digitales (ISD), los gravámenes de compensación y los impuestos sobre Presencia Económica Significativa (PES), al tiempo que continúan participando en iniciativas multilaterales. Este documento examina cómo los países han aplicado estas medidas. El estudio aplica casos prácticos estructurados de Colombia, India, Kenia, Nepal, Nigeria y Tanzania. Analiza los marcos jurídicos, las prácticas administrativas y los resultados en materia de recaudación de estos países, además de identificar características comunes y principales diferencias en los enfoques de implementación. El documento explora los fundamentos conceptuales y las justificaciones teóricas para gravar los ingresos digitales en el país de origen, destacando las limitaciones de las normas actuales de asignación de beneficios que pasan por alto el papel del mercado. A partir de las experiencias de estos países, el estudio desarrolla un marco de aprendizaje entre pares basado en las mejores prácticas emergentes, reconociendo al mismo tiempo los desafíos en la implementación. Finalmente, el estudio propone vías para armonizar las medidas fiscales digitales y describe los elementos esenciales de diseño que deben tenerse en cuenta en la elaboración del protocolo inicial sobre la fiscalidad de los servicios transfronterizos (incluidos los servicios digitales) en el marco de la Convención Marco de las Naciones Unidas sobre Cooperación Internacional en Materia Tributaria.

FOREWORD

Advances in technology and digitalization have led to development of new business models and altered how businesses operate at a rapid pace. The global digital economy now accounts for approximately 15% of world GDP, valued at around US$16 trillion[†]. UNCTAD's Digital Economy Report 2024 estimates that e-commerce sales by business, increased from US$17 trillion in 2016 to US$27 trillion in 2022 in 43 countries, though most of these were domestic sales. International tax rules have not kept pace with the rapid digitalization of business models, creating gaps in taxation. Digital companies can generate profits in a country without a physical presence, allowing them to avoid paying taxes where profits are generated. This denies governments much-needed revenues from one of the fastest-growing sectors of the global economy.

In absence of global consensus, many countries have introduced unilateral measures to tax the digital economy. To support this process, the South Centre collaborated with tax officials and experts to examine the measures adopted in selected countries, including some which are Member States of the South Centre, to document their administrative practices, and the challenges encountered. The paper provides lessons learned and identifies best practices, providing insights to countries seeking to implement or already implementing unilateral measures. It also provides inputs for the ongoing multilateral negotiations under the United Nations Framework Convention on International Tax Cooperation on the taxation of the digital economy.

We are pleased to co-publish this paper with our partners the West African Tax Administration Forum (WATAF). The paper is recommended to policymakers, tax administrators, and scholars as a timely resource for effective taxation of the digital economy and to inform efforts towards building a global agreement on the same.

Dr. Carlos Correa
Executive Director, South Centre

[†] International Data Center Authority (IDCA), *The Global Digital Economy Report 2025*.

PREFACE

Writing a foreword could be challenging but this particular one was with much excitement because the research paper offers valuable insights and is worth reading.

The digital economy's rapid growth has created significant challenges for tax authorities worldwide. This timely study responds to the need for effective taxation of digital economic transactions, particularly in economies with limited technical capacity, low political will, and inadequate tax data infrastructure.

This publication offers a practical guide to administering taxes on digital transactions, providing a clear description and navigation tool for the complex aspects of taxing digital-based economic transactions. The diverse team of authors brings balanced perspectives, supporting cross-border tax reform initiatives that can help mobilize domestic revenue in low-income economies.

With insights from large and small economic contexts across three continents, this study fills practical gaps in digital economy taxation by addressing the challenges of DSTs and SEP. It contributes to the international tax architecture, offering a perspective that can inform the United Nations Framework Convention on International Tax Cooperation. This work shapes global tax governance with developing countries' interests at its core.

This report provides a lucid exposition of the rationale for designing fit-for-purpose tax systems for digital businesses. It is useful for academic, policy, and practical purposes, coming at a critical time when domestic resource mobilisation is crucial in the face of aid uncertainty, trade volatility, and geopolitical tensions.

Member states of the South Centre and West African Tax Administration Forum, as well as other developing economies, will find this work relevant and adaptable in their quest to tax the digital economy effectively. It offers tested best practices, actionable insights, and suggestions for navigating the complexities of digital taxation.

Mr. Jules Tapsoba
Executive Secretary, West African Tax Administration Forum

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INTRODUCTION

Background

The rapid expansion of the digital economy has presented significant challenges to traditional tax systems, particularly in taxing highly digitalized multinational corporations operating across borders. Digital Services Taxes (DSTs), Equalization Levy, and the expansion of permanent establishments' definition to include digital presence, have emerged as innovative solutions to tax the digital economy. With the unlikely implementation of Amount A, the Organisation for Economic Co-operation and Development (OECD)'s solution for taxing the digital economy, many countries are likely to implement DSTs, joining a long list of countries like Kenya, Tanzania, Uganda, Tunisia, India, Canada, France, and the United Kingdom, which have either introduced or are already implementing DSTs (Enache, 2024; Andersen, 2024). Other countries, including Nigeria, Zimbabwe, Colombia, and India have implemented Significant Economic Presence (SEP) tax. Interestingly, some countries like India and Kenya introduced Equalization Levy and DST respectively, in their legislation and subsequently dropped it in favor of the SEP tax.

The practical experiences of countries implementing DSTs and SEP taxes have not been properly documented, leaving a critical gap in actionable insights for other countries. This research paper seeks to bridge this gap by examining the implementation of DSTs and similar measures in various developing countries, and providing a framework for peer learning for other developing countries aiming to adopt such measures. Additionally, this research comes at a critical time when the negotiations of the United Nations Framework Convention on International Tax Cooperation (herein referred to as the "Framework Convention" or "UNFCITC") and its early protocols are ongoing with the final texts expected in July 2027 (Intergovernmental Negotiating Committee on UNFCITC, 2025). As countries seek a global solution to address the challenges of taxation of the digital economy under the Framework Convention, the research provides valuable insights on harmonization and standardization of DSTs and SEP taxes, and draws important insights for one of the UNFCITC early protocols on taxation of cross-border services in an increasingly digitalized and globalized economy.

Objective

The objective of the research paper is to explore how countries have implemented DSTs and similar measures for taxation of the digital economy, including the legal framework, tax administration process, economic impact, challenges and lessons learned. In doing so, it aims to develop a peer learning framework for other countries considering implementing such measures, and provides insights into the harmonization and standardization of existing DSTs and similar measures, and inputs for the protocol on taxation of cross-border digital services.

The countries of study are Colombia, India, Kenya, Nepal, Nigeria, and Tanzania.

Research approach

This study adopts a comparative qualitative research approach, combining legal and policy analysis with structured case studies to explore how selected developing countries have responded to the taxation challenges of the digital economy. The study reviews legal texts, administrative guidelines, policy documents, available tax data, impact assessments, and relevant literature to assess the design, implementation and outcomes of national digital tax measures. Tax administration officials and tax experts, with first-hand knowledge of the legal

and administrative processes, authored the country case studies. Their input ensures that the case studies reflect context specific analysis and that the findings are practically relevant. All contributors followed a common analytical framework and thematic outline as described below to ensure consistency and comparability across cases:

1. **Background:** Overview of the country context, size of digital economy, and motivation for introducing DST or SEP tax.
2. **Legal Framework:** Description of the legal basis for the tax measure, including whether it was enacted as stand-alone legislation or integrated into the income tax code; scope of taxable services; and applicable tax rates.
3. **Tax Administration:** Discussion of the implementation roadmap and institutional framework, including department, number of staff, capacity building or training programs, and digital system used.
4. **Registration and Compliance:** Discussion of the registration process, collection mechanisms, compliance monitoring, including filing of tax returns, tax audits, dispute resolution, and enforcement procedures.
5. **Output and Evaluation:** Summary of implementation results, including the number of registered entities, revenue collected, compliance levels, and any documented economic impacts.
6. **Challenges, Success Factors, and Lessons Learned**: Identification of implementation challenges, best practices, and areas for improvement.

The contributors from the South Centre worked on the literature review and conclusion chapters, providing the broader conceptual foundation and synthesizing cross-country experiences to inform recommendations on policy reforms for improving and aligning digital tax rules at the national and multilateral level.

Organization of the paper

The second chapter provides a review of literature and emerging trends in the taxation of the digital economy. It provides conceptual foundations and theoretical justification for taxation of digital service providers in market jurisdictions and an overview of national and multilateral approaches to taxing the digital economy. The subsequent chapters that form the core of the paper consists of case studies of the six countries: Colombia, India, Kenya, Nepal, Nigeria, and Tanzania. For each country's case studies, the paper discusses the following key thematic aspects: Background, legal framework, tax administration including registration and compliance, implementation outcomes, and challenges, successes and lessons learnt.

The conclusion chapter provides a comparative analysis of how these six countries have implemented digital tax measures. It presents cross-cutting practices, challenges, and lessons to identify emerging best practices. Based on the comparative review, the chapter proposes key elements for the harmonization and streamlining of digital tax policies. It also offers suggestions on design features that could be part of the UNFCITC’s protocol on taxation of cross-border services in a highly digitalized economy.

LITERATURE REVIEW AND EMERGING TRENDS

It is not business as usual

The digital economy has experienced remarkable growth over the past few decades, a trend that is expected to grow exponentially in the coming years. The size of the digital economy is estimated to vary between 4.5% and 15.5% of global gross domestic product (GDP), depending on whether a narrow or a broad definition is adopted (UNCTAD, 2019, p. 48,69). The rapid expansion of digital businesses and technology-driven services has fundamentally transformed global business operations. The COVID-19 pandemic accelerated this digital shift, proving that companies can thrive in a fully digital world. While traditional businesses struggled with lockdowns and supply chain disruptions, digital giants saw record growth as people turned to online services more than ever before, demonstrating the ability of digital businesses to operate across borders with minimal physical presence (World Bank, 2024, p. 11).

The growth in digital businesses including e-commerce platforms, streaming services, online market places, and digital payment platforms indicate an economic shift from physical to digital transactions. The world of e-commerce is dominated by a few digital giants; the 2024 United Nations Trade and Development (UNCTAD) Digital Economy Report indicates that 6 platforms account for about 80 per cent of the gross merchandise value (UNCTAD, 2024, p. 147). These giants also spend substantial amounts in lobbying with governments (UNCTAD, 2019, pp. 88–89).

Advancement in technology, removal of trade barriers and financial controls has revolutionized the way businesses operate across borders. Companies today can function without a physical footprint and engage in cross-border transactions from virtually anywhere in the world. What once seemed abstract like running a multinational business remotely, has become a common reality. Consumers can order goods from across the globe and have them delivered to their doorstep with a few taps on their smartphones. More and more individuals and businesses provide services remotely.

The digital revolution has created incredible opportunities in businesses but has also exposed major flaws in how businesses are taxed. Today, the world's most valuable companies do not rely on physical factories or real estate, but they generate wealth through intangible property which may be located in a low tax jurisdiction away from where value is created (Bauer et al., 2019)**.** Yet, tax systems remain stuck in the past, designed for a world where businesses needed a physical presence to operate. The conventional tax principles, usually based on physical presence and permanent establishments, are no longer adequate in capturing value creation in the digital era (Moreno & Brauner, 2019), necessitating countries to find solutions to tax the digital economy. The authors explore **conceptual foundations of taxation of digital economy, theoretical justifications, emerging solutions at the national and global level** in this chapter.

The urgency to redesign the current tax system

As digital companies expand their reach without needing local factories, offices or employees, governments struggle to collect their fair share of taxes. Ariyibi et al. (2024) identifies three key challenges in taxation of digital business which are: the traditional definition of **permanent establishment**, the assessment of the **value created** by digital businesses, and determination of the **jurisdiction(s) to tax** the digital transaction. This is due to the fact that digital business models interact with users, service providers and buyers in multiple countries

at a time with little physical presence, a fundamental shift from the traditional business models as we know them (Kim, 2019; OECD, 2018, p. 24). In a hypothetical example, a company based in country A, with registered intellectual property in country B, offers online advertising services to businesses in Country C, collects user data from Country D, and generates revenue from customers in Country E, may end up paying no corporate taxes in any of these places because it has no physical office or factory or employees there. Under current tax rules, it is as if the company does not exist in those countries, even though it profits from their economies.

The current tax system has led to significant tax base erosion as digital companies exploit gaps in existing tax rules, and end up paying little or no taxes on their profits (Aslam & Shah, 2021; European Commission, 2017). The Fair Tax Foundation's 2025 report on the Silicon Six, Alphabet, Amazon, Apple, Meta, Microsoft, and Netflix, reveals persistent, large-scale tax avoidance practices (Fair Tax Foundation, 2025). Over the past decade, these six tech giants generated USD 11 trillion in global revenue and USD 2.5 trillion in profits, yet their effective corporate tax rate was just 18.8%, far below the global average of 27%. This highlights the urgent need for targeted taxation measures in the digital economy.

From the foregoing, it is clear that the current tax systems should be redesigned to align them with the realities of the digital economy and modern business models. This transformation requires rethinking the foundational principles of taxation to ensure that all businesses contribute their fair share of taxes in the jurisdictions where they derive value and economic benefit (Moreno & Brauner, 2019). Such a redesign should ensure fair profit allocation rules, tax certainty, and reduce the compliance burden for businesses and governments.

Conceptual foundation for taxation of the digital economy

Before we explore the measures for taxation of the digital economy, it is first important to discuss the nature of digital businesses focusing on how they operate and the key features. The OECD's Action 1 Final Report on *Addressing the Tax Challenges of the Digital Economy*, discusses the digital economy business models (OECD, 2015). Article 12B of the United Nations (UN) Model Tax Convention also provides a list of Automated Digital Services and their detailed description in the Commentaries. Some of the digital business models discussed in these documents are highlighted below:

e-commerce allows the sale and purchase of goods and services over the internet without requiring any physical presence. e-commerce platforms provide for own sales while online marketplaces allow for third party sellers. Online marketplaces such as Amazon act as intermediaries between buyers and sellers. e-commerce transactions can be business to business (B2B), business to consumers (B2C), or consumer to consumer (C2C). These online platforms may generate revenues from own sales, commissions, advertising, and data services.

Companies providing **online payment services** such as PayPal facilitate cross-border payment processing, currency conversion, and digital wallets. These services form a central part of digital transactions and are often provided remotely. They charge transaction fees for financial services provided.

Some companies that rely on **online advertising and data monetization**, such as Google and Meta, earn significant income by leveraging user data and user participation. User interaction is a key driver of value for these business model. Advertisers can pay for the services based on the number of times the advertisement is viewed or based on the action of the viewers. The business model utilizes aggregated user data to deliver highly targeted

advertising and the advertisers often pay based on user engagement metrics, such as impressions (views) or actions taken (clicks, conversions).

Cloud computing models offer remote, subscription-based access to software and data storage. **Digital content services providers** deliver content such as music, eBooks and videos digitally to users worldwide. These services are delivered across borders without establishing local presence.

Digital intermediation platforms like Airbnb and Uber, facilitate services without owning the underlying assets or employing the labor involved. Their value lies in connecting the users.

Social media platforms which include professional networking platforms rely on user-generated content and engagement. These platforms benefit from network effects and their value increase with each additional user.

All the business models highlighted above share **distinct features** that challenge traditional tax principles. Some of these key distinct features of digital businesses as presented in the OECD's Action 1 Final report, and the *Tax Challenges Arising from Digitalisation – Interim Report 2018* (OECD, 2015; 2018) are as follows:

- They achieve "scale without mass". They operate on a global scale with minimal or no physical presence.
- Reliance on intangible assets, which are highly mobile.
- Reliance on data and user participation.
- Multisided platform models which facilitate interactions between distinct group of users located in different jurisdictions.
- Tendencies of monopolies or oligopolies in some digital business models due to strong network effects.
- Volatility in terms of new innovations and continuous disruption within digital markets due to low entry barriers and rapid technological advancement.

Shortcomings of the current system in taxing the digital economy

The nature of digital businesses makes the conventional tax system redundant. The current rules are deficient in establishing the connection (**nexus**) with the market jurisdictions and in determining the **value created** in each market jurisdiction. As already indicated in the preceding section, digital companies can serve millions of customers in different jurisdictions with little or no physical presence in those jurisdictions. Consequently, the income associated with these events goes untaxed. The fact that the traditional tax rules fail to adequately define the value created by digital businesses through their activities in the different jurisdictions further complicates the matter. Value creation by digital business models, through for instance collecting user data, leveraging on user participation, and network effects, does not align with the conventional tax systems, leading to difficulties in establishing the value generated for tax purposes (Ariyibi et al., 2024; Moreno & Brauner, 2019; OECD, 2018). Multinational businesses, including digital businesses, are also known to shift profits through aggressive tax planning strategies to minimize their tax liability (OECD, 2015). Strengthening the call to enhance the tax measures targeting the digital economy is necessary.

Theoretical justifications

The push for reform in taxing the digital economy is supported by a broad set of legal, economic, and policy arguments and principles, as discussed in this section.

Value creation principle and sourcing of income

The OECD's approach to taxing the digital economy is centered on the notion of "value creation," which requires that profits should be taxed where value is created in cross-border transactions. The prevailing interpretation of value creation puts emphasis on supply-side activities like research and development and production while ignoring market-side factors like the consumer demand and user participation (Devereux & Vella, 2018; Singh, 2018). The authors argue that this interpretation is economically flawed since the market plays a vital role in determining sales revenue and profits. Their analysis shows that market demand which is shaped by factors such as consumer preferences, user participation, data generation, and market access, contributes meaningfully to income generation, yet this contribution is excluded from the current tax nexus logic.

The nature of digital businesses allows them to generate substantial value in market jurisdictions through mechanisms such as user participation and data, and network effects which are market sided. Yet, the current tax nexus ignores these important market contributions. Thus the nexus should be expanded to include market contributions, thereby ensuring that source countries can legitimately exercise taxing rights aligned with the realities of value creation in the digital economy. Hongler & Pistone (2015) propose a new permanent establishment (PE) concept based on "digital presence," asserting that the location of significant digital user engagement or revenue flows should be adequate for tax nexus purposes.

Benefit principle and economic allegiance

The benefit principle is a principle of a good tax that holds that taxpayers should contribute to the state's finances in proportion to the benefits they receive from public goods and services. Digital companies derive substantial benefit from the market jurisdiction's infrastructure including telecommunications networks, internet infrastructure, and regulatory and economic environment, even without the physical presence. Therefore, under the benefit principle, they should contribute financially through taxation. Hongler & Pistone (2015) draw on early theorists like Von Schanz and Harding to reinforce the idea that economic allegiance, defined as a functional connection between a state and economic activity, provides a legitimate foundation for tax jurisdiction in the digital context.

Promote market efficiency

One of the features of the digital economy is *scalability without mass*, as discussed in the section on *Conceptual foundation for taxation of the digital economy.* This is because many digital business models are characterized by high initial set up costs (for instance costs for research and research and platform development) but exceptionally low marginal costs for replicating and distributing products or services (e.g. for adding users to a social network or streaming service) compared to traditional industries dealing with physical goods and services (Cui & Hashimzade, 2019). Once a digital company incurs the initial set up costs to develop the intellectual property, the cost of serving an additional user or market is negligible compared to the revenue generated (Cui & Hashimzade, 2019).

Digital economy, therefore, generates significant economic rent, yet much of it remains untaxed due to outdated tax rules. Economic rent refers to the excess profits earned by businesses beyond the normal returns required for production and operation. Unlike traditional businesses, where profits are often linked to physical assets, digital firms enjoy high profit margins with low marginal costs from their intangible assets. Furthermore, digital platforms

often benefit significantly from economies of scale and scope, allowing them to serve a global user base from centralized hubs with relatively minimal incremental cost per user. The ability to scale globally with minimal additional costs generate supernormal profits for these firms. This reinforces the dominance of digital companies, allowing them to consolidate monopoly power, while widening economic inequalities and depriving governments tax revenue needed to fund public goods and services.

Cui & Hashimzade (2019) argue that these rents are often location-specific because they depend on access to national consumer markets, legal systems, public infrastructure, and network engagement in particular jurisdictions, which are not captured by current international tax rules. Left untaxed, such rents contribute to growing economic inequality, the erosion of national tax bases, and the distortion of competition. It creates an uneven playing field, favoring digital multinationals over tax-compliant local businesses. Taxing economic rents in the digital economy is therefore justified on both efficiency and equity grounds (Cui & Hashimzade, 2019). It is necessary to tax these economic rents to prevent market distortions and ensure fair market competition.

Equity and fairness principles

Digital businesses have a low effective tax rate compared to traditional business models, distorting competitiveness (European Commission, 2017; Fair Tax Foundation, 2025). Further, digital business taxation exacerbates the prevailing problem of imbalanced taxing rights between source and residence states (Dagan, 1999; Hearson, 2018; Feng et al., 2024). Taxing the digital economy levels the playing field across digital and traditional business models and protects taxing rights of source states, thereby promoting equity and maintaining public trust in the tax system.

Address tax evasion and avoidance

The characteristics of the digital economy, including reliance on data and intangibles which are highly mobile and the lack of physical presence increase the opportunities for tax base erosion and profit shifting (BEPS) (OECD, 2015). A report by the (European Commission, 2017) indicates that digital businesses face an average effective tax rate of 9.5%, compared to 23.2% for traditional multinational firms, which is 50% less in taxes than traditional companies operating in the same markets. The Fair Tax Foundation (2025) estimates that some of the world's largest digital companies, including Google, Amazon, and Facebook (Meta) have lower average effective tax rates of 18.8% compared to the global tax rate of 27% due to aggressive tax planning. Profit shiting by multinationals costs countries USD 348 billion in lost tax revenue annually (Tax Justice Network (TJN), 2024). These low effective tax rates for digital businesses justify the call for specific tax measures targeting digital activities or revising international tax rules to counteract the heightened BEPS risks and protect the tax bases of market jurisdictions.

Emerging solutions

The problem of taxation of the digital economy has not escaped the attention of governments around the world. This growing concern has pushed countries to look for solutions through international forums, notably the OECD and the UN. The 2015 OECD's Action 1 Final Report brought the issue to the fore (OECD, 2015). The report identified digital business models and their key features, including reliance on intangibles and user data, and how these features increase BEPS risks. The 2015 report did not recommend a specific course of action but it outlined potential approaches that could be explored further, thus laying the foundation for the OECD/Group of Twenty (G20) Two-Pillar Solution on taxation of the digital economy and subsequent national measures. It outlined three potential solutions to address tax challenges

from digitalization: redefining nexus rules to include significant economic presence, introducing a withholding tax on digital transactions, and applying an Equalisation Levy. The report also highlighted the importance of improving value added tax (VAT) and goods service tax (GST) rules for digital goods and services, and international coordination.

The new nexus rule would be based on the significant economic presence which entails existence of a sustained economic relationship with a jurisdiction through technology or automated tools without requiring physical presence (OECD, 2015, p. 107). The sourcing rules for the new nexus would be based on: the **revenue** or sales sourced from a particular jurisdiction; **digital presence factors** which could be determined by local domain name, local digital platform or local payment option; **user based** factor determined by the number of active users, number of online contracts concluded, or user data collected. A country can use a combination of the sourcing rules. Some countries have used **investment or asset based indicators** to complement the digital factors. The 2015 BEPS Action 1 Report acknowledged the difficulties of attributing profits to significant economic presence establishment under existing rules, which rely on functional analysis tied to physical presence. To address this limitation, the report proposed **alternative profit allocation methods, including fractional apportionment**[3] based on predetermined allocation keys (such as sales or users) and the use of a deemed profit formula.

Withholding tax (WHT) on payments by residents for digital goods and services was another option discussed in the Report (OECD, 2015, p. 113). The WHT on the gross payment would be a final tax or act as an enforcement mechanism for net basis taxation under SEP, where WHT paid would be creditable against SEP tax. The tax could be withheld and remitted by resident businesses or local intermediaries processing the payment. The third alternative discussed in the report was an equalisation levy designed to level the playing field between domestic and foreign suppliers. These proposals inspired a wave of national measures such as the adoption of equalization levy in India, SEP taxes in Nigeria and Indonesia, and DSTs in France, UK, Spain, Kenya, among many other countries (Cebreiro-Gomez et al., 2022; Enache, 2024).

In February 2019, the OECD released a public consultation document outlining the framework for Pillar One, later formalized in the 2021 political agreement on Pillars One and Two (OECD, 2021; 2019). Notably, the 2021 report dropped some proposals captured in the 2015 report, such as the withholding tax on digital transactions and the Equalisation Levy put forward by developing countries. Instead, it adopted a narrow version of the SEP concept, with limited scope and applicability; Amount A of Pillar One, which covers the taxation of the digital economy, reallocates only a portion of profits from a small number of the largest and most profitable multinationals to market jurisdictions, offering limited benefits for most developing economies.

A study jointly produced by the South Centre, West African Tax Administration Forum (WATAF) and African Tax Administration Forum (ATAF) indicates that developing countries would derive greater revenue from national measures like DSTs than from Amount A (Starkov & Jin, 2024). Amount A would raise an estimated EUR 6.9 billion for South Centre member states, while a 3% DST could generate between EUR 7.7 billion and EUR 11.8 billion, depending on whether hybrid Automated Digital Services (ADS) companies are included. DSTs offer greater and more reliable revenue potential for developing economies compared to the limited reallocations proposed under Amount A.

[3] The OECD considered fractional apportionment to allocate profits to a significant economic presence, which would involve the definition of the tax base, allocation keys, and the weighting of these allocation keys, but noted that this approach would be a departure from current international standards for profit attribution to a PE (Para. 7.6.2.2 of *OECD, Action 1 Final Report*, *2015,* p. 112).

The implementation of Amount A has stalled due to lack of global consensus. The multilateral convention for implementing Amount A requires ratification by at least 30 jurisdictions that account for at least 60% of the ultimate parent entities of multinationals expected to be in scope (OECD, 2023). The likelihood of achieving this threshold is uncertain, given the lack of support from the United States, home to most of the multinationals in scope. On the other hand, national or unilateral measures face threats of retaliation from the US as it perceives them as targeting US multinationals. However, this has not stopped countries from implementing national measures to protect their tax base. Challenges of implementing national measures such as uncertainties for business due to inconsistent national rules, and the risk of double taxation, still necessitate the need for a coordinated multilateral approach.

In 2021, the UN Tax Committee adopted Article 12B of the UN Model Tax Convention, introducing provisions for both gross basis and net basis taxation of ADS. The gross basis introduces a withholding tax on payments for ADS, while the net basis is an alternative approach that companies can opt into which is based on a deemed profit. These two approaches mirror some of the proposals in the 2015 OECD Report on WHT and SEP. Article 12B of the UN Model, already included in two of Tanzania's tax treaties, prioritizes the taxing rights of market jurisdictions and aligns with the interests of developing economies that host large user bases but struggle to tax digital profits under traditional nexus rules. However, its sourcing rules which are based on the location of the payer are weak, as payment can be rerouted through third countries, and local payment may fail to capture the value of user based interactions.

More recently, the negotiations for the UN FCITC and its early protocols one of which is Taxation of Cross-border Services in a Highly Digitalized Economy, provided a potential new pathway to find a global solution. This development reflects not only a technical alternative but also a growing frustration with the stalled progress under the OECD-led process. The unilateral and international developments are discussed further below.

Unilateral solutions

Many countries have introduced DSTs, Equalisation levy, SEP taxes, and withholding taxes. Other tax measures include consumption taxes, such as VAT and GST.

DSTs are charged on gross revenues derived from digital services provided within the country at the rate ranging from 1.5%-7% across countries (Enache, 2024). The common digital services covered include revenues from e-commerce platforms, online marketplaces, online advertising services, the sale of user data, and intermediation platforms. Revenue is typically sourced based on the location of the users engaging with the service or payment. While still relatively new, DSTs continue to generate significant and growing revenue streams for implementing countries. The **Equalisation levy** is equivalent to DSTs in practical terms as it is also imposed at a fixed rate on the gross revenue of non-resident digital service providers. It is unique to India.

Research demonstrates that, for many developing countries, DSTs are likely to yield more substantial and predictable revenue than the limited allocations under Amount A of OECD's Pillar One. A 3 per cent DST could generate between 7.7 billion and 11.8 billion Euros, depending on whether hybrid ADS companies are included within the DST's scope, in comparison to 6.9 billion from Amount A in total tax revenue for all the South Centre 55 Member States (Starkov & Jin, 2024).

The **SEP** rules redefine the threshold for creating a taxable nexus to include factors beyond physical presence, specifically targeting digital business models. They create a digital permanent establishment, beyond the traditional permanent establishment which rely on

physical presence. Nexus can be triggered based on exceeding revenue thresholds from digital transactions within the country, use of local domain or platform, local payment, engaging with a significant number of users, or entering into specific types of digital contracts, among other forms of digital interactions. The profits of an SEP are taxed at the corporate tax rates. The profits are usually determined using a deemed profit approach in most of the implementing jurisdictions.

Withholding Tax (WHT) on digital services is also common. It is a tax, usually withheld by the payer, on gross payments made by a resident to a non-resident provider of digital services. It can be a final tax or can be creditable against future tax liabilities on the corporate profits. It is common for B2B transactions and may present challenges for B2C transactions as individual consumers are not typically equipped to withhold tax on their purchases. The line between WHT and DSTs is sometimes not clear, though importantly both apply to revenues and not profits. It is thus helpful to identify some key differences. While DST may be separate from the income tax system, WHT is part of the income taxes and applies to a broad set of payments to non-residents including dividends, interest and royalties. WHT is withheld at source by the payer unlike a DST that is usually remitted by the non-resident service provider in most cases. A WHT will usually be available for foreign tax credit.

A World Bank's 2021 report on Digital Service Tax confirmed that more and more countries continue to adopt unilateral measures to tax the digital economy (Cebreiro-Gomez et al., 2022). A report published by Tax Foundation in April 2024 indicated that 18 countries had implemented DSTs (Enache, 2024). A more recent report by KPMG released in April 2025 indicates that 35 countries have enacted legislation to introduce some form of direct taxes for the digital economy, that is, DSTs, SEP Taxes, and WHT (KPMG, 2025). A sample of countries implementing direct taxes is outlined below:

- France (2019): Introduced a 3% DST on revenues from digital advertising and platforms.
- United Kingdom (2020): Applied a 2% DST on search engines, social media, and online marketplaces.
- India (2016): Equalization levy of 6% on advertising in 2016. It was expanded to cover e-commerce supply and services in 2020 at a rate of 2%. Introduced SEP rules in domestic laws effective in 2022.
- Turkey: Implemented a DST of 7.5% on gross revenue derived from digital services in March 2020.
- Nigeria: Implemented SEP tax in 2020.
- Indonesia: Implemented SEP in 2020. However the implementing regulations are yet to be enacted, awaiting a global solution[4].
- Kenya: Implemented DSTs in 2019. Introduced SEP in December 2024.
- Colombia: Implemented SEP tax in 2022.
- Nepal: Implemented DSTs in 2022 at the rate of 2% on digital service providers.
- Tanzania: Implemented DSTs in 2022 at the rate of 2% on digital service providers.
- Canada: DST in 2024 on online marketplaces, social media, online advertising and user data.

The European Commission's 2021 Workplan included a proposal for a digital levy to ensure fair taxation (EU, 2020). The work on this proposal was, however, put on hold to give way for the negotiation of OECD Pillar One Solution. The Commission has not resumed active legislative work on it, pending the outcome of global tax negotiations. The Commission had

[4] The Indonesian Finance Minister announced that the country would not be pursuing digital service taxes almost immediately after the US named it in the Section 301 report in 2020 as one of the countries whose DSTs were being investigated - Reuters (June 16, 2020): https://www.reuters.com/article/technology/indonesia-says-us-not-investigating-vat-on-digital-services-idUSKBN23N15Y/.

earlier made a proposal to introduce a 3% DST in March 2018 which failed to get support from members. That notwithstanding, some 11 individual European Union (EU) member states had already introduced their own DSTS by April 2024 (Enache, 2024), and many others like the Czech Republic and Belgium have made proposals to do the same. On January 31, 2025, Belgium reaffirmed that it would introduce a digital services tax by 2027 if no agreement is reached at the EU or international level (KPMG, 2025).

The rise of national measures to tax the digital economy reflects the urgency to protect domestic tax bases. Countries have implemented DSTs and SEP tax in varied forms, targeting different types of digital activity including online advertising, digital platforms, and user data, often with distinct thresholds, rates, and compliance obligations. This fragmented approach risks imposing significant compliance costs on digital businesses operating across borders and may lead to double taxation in cases where tax credits or treaty relief are unavailable. While the national measures offer a practical interim solution, there is a need for coordinated international rules in taxing the digital economy.

Consumption Taxes

An increasing number of jurisdictions have introduced consumption taxes, such as VAT and GST, on digital goods and services to address tax base erosion from cross-border digital transactions. As of April 2025, 113 countries had implemented indirect taxes regimes on cross-border digital sales (KPMG, 2025). These taxes ensure that digital goods and services are taxed where consumption occurs, to level the playing field between domestic and foreign suppliers.

Consumption taxes are not income taxes. They are ultimately borne by consumers and do not address the core issues of nexus, profit shifting or tax base erosion associated with digital multinational enterprises. While consumption taxes ensure taxation at the point of consumption, they are not designed to capture corporate income generated in market jurisdictions by digital companies. Just as corporations are subject to corporate income tax on profits and VAT is charged on the sale of their goods and services, a comprehensive tax system can and should support the coexistence of both income and consumption taxes. Income-based measures, such as DSTs, SEP taxes, and WHT, address the allocation of taxing rights over business profits, while consumption taxes target the expenditure by end-users.

Considerations for national measures for digital economy taxation

Despite the growing adoption of national measures for taxation of the digital economy, they present a range of technical, legal, and economic issues that countries need to consider before implementation. The key issues are presented below:

Practical and administrative challenges

Countries implementing digital taxation need to make practical and administrative considerations, particularly in defining the scope and enforcing rules on non-resident entities. Countries must carefully consider the scope of the digital services subject to tax, which may be complicated by the diversity of business models in the digital economy. The scope can cover a wide range of activities defined by where the revenue is sourced, use of local platforms and intermediaries, digital presence, or user interactions. Countries use a combination of these to define the sourcing rules. To refine these rules, some jurisdictions adopt minimum revenue thresholds to exclude smaller players and focus enforcement on large multinationals. For instance, France's DST targets firms with global revenues above EUR 750 million and

French revenues exceeding EUR 25 million (Enache, 2024). India's Equalisation Levy applied only to non residents with digital transactions with payments exceeding INR 0.1 million (USD 1,500), or systematic business solicitation or interaction with over 300,000 Indian users in a year.

Countries may face challenges in tracking digital activity of multinational businesses, and sometimes just rely on self-reporting. It may be difficult to establish the location of users for revenue sourcing, especially when services are delivered through third-party platforms or anonymized interfaces.

Countries also face enforcement challenges since digital taxes target non-resident digital service providers who may not have a local physical presence. Verification of tax returns and enforcement of tax measures becomes a difficult task for countries with limited administrative capacity or without access to detailed information on the global operations of digital firms. Tax authorities struggle to assess tax liability or enforce collection without effective information-sharing mechanisms of international cooperation.

Economic structure and tax incidence

DSTs are levied on gross revenues, without accounting for the costs incurred by service providers. Critics argue that this leads to over-taxation in low-margin business models, and that taxing revenue rather than profit can distort outcomes as it does not account for variations in cost structures across digital business models (Enache, 2024). However, this criticism is not universally accepted: in many cases, digital services have low marginal costs, meaning that the revenue generated may closely approximate profit. As Cui & Hashimzade (2019) note, these services often rely on scalable technology with high initial development costs but minimal ongoing operational expenses. In such contexts, taxing gross revenue may not diverge significantly from taxing net profit. Further, most countries have adopted modest DST rates to mitigate excessive burdens.

SEP taxes have also been challenged on the same basis because in most cases profit is deemed as a percentage of gross revenue, thereby having the effect of a tax on a percentage of gross revenue. Falcão (2025) notes that countries implementing SEP taxes often lack clear, operational frameworks for profit attribution. Most countries use a deemed profit formula, which applies a fixed margin on revenues. This promotes simplicity but may fail to reflect sector-specific profit margins, creating distortions between low-margin and high-margin digital businesses. To address this, some countries allow companies to declare actual costs incurred in generating digital revenue. In such cases, tax is imposed on actual profit rather than deemed margins. However, where such information is unavailable or difficult to verify, especially for non-resident firms, deemed profit approaches offer administrative simplicity and promote certainty in compliance.

Another unresolved issue is **tax incidence** of DSTs. There is ongoing debate over who ultimately bears the cost of DSTs, whether it is the large digital multinationals, consumers, or smaller businesses that rely on digital platforms. Tax incidence depends on the price elasticity of demand of a digital good or service. Elasticity represents the sensitivity of the consumers' demand to changes in price of a good or service. For highly elastic services, especially where there is high competition from other service providers, firms may be unable to raise prices without losing users, thus bearing most of the tax burden themselves. In contrast, for inelastic services, especially in the case of services supplied under oligopolistic and monopolistic market structures, the consumer demand is less responsive to price increases, thus the cost is more likely to be passed to consumers. Therefore, the incidence of DSTs varies across markets and business models, highlighting the need for policymakers to consider sector-specific dynamics when designing digital tax measures.

The incidence of DSTs can be economically complex. A study done by Computer & Communications Industry Association (CCIA) indicated that a proposed increase in the DST from 2% to 6% in the UK could raise the annual tax burden on US digital firms to USD 2.66 billion if not passed to the consumers (Wagener & Cade, 2024). When passed on to consumers, the tax would lead to a 1.5% increase in prices and a 4.2% decline in digital service demand, resulting in a broader annual economic loss of USD 4.4 billion for the US multinationals from the decline in demand and reduced competitiveness. These figures illustrate that threats by multinationals of developed countries to pass on DSTs to consumers can bear significant economic costs to them, including reduced revenues and competitiveness.

Digital companies subject to DSTs may not benefit from **double tax relief**, as DSTs often fall outside the scope of traditional tax treaties. This increases the risk of double taxation or overtaxation. However, as some studies note, many large digital companies pay relatively low effective tax rates compared to traditional businesses (EU, 2017; Fair Tax Foundation, 2025). For these firms, a modest DST may not represent an excessive burden, and may instead help restore competitive neutrality between digital and traditional businesses.

Interaction with tax treaties

National tax measures on the digital economy also raise legal questions about their compatibility with existing tax treaties. The key issue is whether DSTs and SEP rules constitute income taxes or consumption taxes, or even tariffs. This classification affects whether they fall within the scope of double tax treaties and whether relief from double taxation can be claimed. The lack of international consensus on their legal status adds further uncertainty for both businesses and tax administrations.

Some countries like France, UK, India, have implemented DSTs and Equalization Levy as separate from income taxes. This means that they will not be affected by treaty provisions. In cases where DSTs and SEPs are treated as part of income taxes, their effectiveness may be reduced by treaty provisions. There is a need for clearer multilateral standards on how digital taxes interact with tax treaties.

Alternatives to national measures

National tax measures on the digital economy generate revenue to countries but carry significant risks, including trade tensions, double taxation, and increased compliance costs for businesses. A multilateral approach could address some of these risks.

The Amount A of the OECD's Pillar One seeks to reallocate taxing rights to market jurisdictions where multinational enterprises (MNEs) derive significant revenues, regardless of physical presence (OECD, 2023). The proposal targets MNEs with global turnover exceeding EUR 20 billion and profit margins above 10%, applying only to the residual profits of the largest and most profitable firms. The design of Amount A reflects the interests of residence countries reflected in its narrow scope, limited to the largest and most profitable multinational enterprises (Grondona et al., 2020). The technical complexity of the implementation rules, reliance on political consensus, and heavy administrative burden with low revenue yield for developing countries pose further barriers to effective participation by low-capacity tax administrations (Grondona et al., 2020). The implementation of Amount A has faced delays and political pushback from the US.

Another option is Article 12B of the UN Model Tax Convention introduced in 2021 on taxation of automated digital services. Unlike Amount A of Pillar One, Article 12B adopts a simplified approach based on withholding taxes or a simplified method for computing net profits rather

than Amount A's complex profit allocation rules. It permits taxation of income from automated digital services on either a gross or net basis, offering flexibility in implementation. However, its effectiveness is limited by weak sourcing rules, which rely primarily on the location of the payer and are vulnerable to manipulation.

Another emerging alternative is one of the early protocols to the proposed UN Framework Convention on International Tax Cooperation (UNFCITC) on the *Taxation of Cross-Border Services in a Highly Digitalized Economy*. This initiative represents a significant opportunity to redefine international tax norms for digital economy taxation in a more inclusive and equitable manner. If broadly adopted, it could provide a unified framework that reduces fragmentation, mitigates double taxation risks, and enhances certainty for both governments and businesses. However, this may take sometime since the final drafts are expected in July 2027. The last chapter offers key considerations to inform the design of the protocol, drawing insights from the country case studies. It builds on valuable foundational contributions by Chowdhary et al. (2024), offering further perspectives grounded in practical country experiences.

Conclusion

The rise of the digital economy has challenged the foundations of international tax rules. Traditional concepts such as physical presence and tangible assets no longer capture how value is created and profits are earned in modern digital business models. Digital companies generate income in jurisdictions where they have no physical footprint but significant user interaction, data collection, and market engagement.

Theoretical frameworks, including the benefit principle, economic allegiance, user participation, and location-specific rent, support the need for reform. These principles justify granting taxing rights to market jurisdictions, where users, data, and demand play a central role in generating value. Scholars like Devereux & Vella (2018), Singh (2018) and Hongler & Pistone (2015) argue that these market-based contributions are economically meaningful and should form part of a revised tax nexus.

Efforts to update tax rules have taken shape through various global and national initiatives. The OECD's BEPS project and its Pillar One proposal aim to allocate a portion of taxing rights to market jurisdictions. However, the scope of these reforms is narrow covering the largest and most profitable MNEs and implementation has stalled due to lack of global consensus. The UN's Article 12B offers a simpler method, allowing source countries to tax digital services either on a gross or net basis, but is yet to be adopted in any tax treaties.

In response to stalled global consensus, many countries have introduced national measures. DSTs, SEP taxes, equalization levies, and withholding taxes are now used to capture revenue from digital platforms. These tools aim to restore tax fairness by ensuring that digital companies contribute to public finances in the countries where they earn income. Countries have collected significant revenues from DSTs. DSTs are likely to yield more revenue compared to the limited allocation under OECD Amount A (Starkov & Jin, 2024). They are also simple and easier to implement making them appealing, particularly for developing countries with limited administrative capacity. However, they also risk unilateral coercive threats by the US,[5] high compliance costs and double taxation. In the meantime, countries can continue implementing carefully designed national measures as a means to protect tax

[5] See for example the US Memorandum issued in February 2025 titled, "Defending American Companies and Innovators From Overseas Extortion and Unfair Fines and Penalties" which states that the US will impose tariffs and take "other responsive actions" against countries with Digital Service Taxes and similar measures. (https://www.whitehouse.gov/presidential-actions/2025/02/defending-american-companies-and-innovators-from-overseas-extortion-and-unfair-fines-and-penalties/)

bases and collect the much needed revenue, as they work towards finding a global solution to tax the digital economy in the near future.

Overall, the taxation of the digital economy reflects both a problem and an opportunity. The problem lies in the mismatch between current tax rules and the way digital firms operate. The opportunity lies in building a new tax system that reflects economic realities, treats market contributions fairly, and allows all countries to benefit from the digital transformation. The subsequent chapters present country case studies to discuss how countries have implemented national digital economy tax measures, sharing the experiences and outcomes.

COUNTRY CASE STUDIES

I. COLOMBIA

Background

The case of Colombia is unique, as it is both a member of the OECD and a developing country. As a member of the OECD, Colombia has generally adhered to OECD guidelines and agreements, including the October Agreement[6] in 2021, which established a two-pillar solution to address, among others, the challenges posed by the digitalization of the economy. However, the country continues to perceive that the opportunities for domestic revenue mobilization are insufficient, given the size of the Colombian market. Despite the adoption of most of the BEPS recommendations, as well as adhering to all available instruments and receiving substantial technical assistance on tax policy, auditing, and collection, Colombia's tax revenue continues to be well below the average for OECD countries (13.1% of GDP[7] vs. 33.9% of GDP in the OECD as of 2024).

In the digital front, in January 2024, there were 39.51 million reported internet users in Colombia, when internet penetration stood at 75.7 percent[8]. The Colombian government statistics are slightly higher, reporting an internet penetration of 82.9% as of September, 2023[9], in a country of approximately 53 million inhabitants. The value of the digital economy is estimated at 6.5% of the GDP[10], which indicates a possible large tax gap due to the digitalization of the economy in the country.

The OECD solutions and, more specifically, Pillar 1, were deemed as insufficient not just in terms of revenue, but also in terms of scope, as it does not cover the greatest part of the companies that operate in the digital space locally. For this reason, and given the precedent of tariffs imposed by the US after the adoption of DSTs by countries like France in 2021[11], Colombia chose to adopt a Significant Economic Presence (SEP) rule in the tax reform introduced through Law 2277/2022 in December 2022. This measure was drafted in a way to prevent interpretation of discrimination against US companies, and to prevent inclusion in the list of national measures to be removed if Pillar 1 entered into force.

[6] OECD, "Statement on a Two-Pillar Solution to Address the Tax Challenges Arising from the Digitalisation of the Economy", October 2021. Available from https://www.oecd.org/en/about/news/announcements/2021/10/statement-on-a-two-pillar-solution-to-address-the-tax-challenges-arising-from-the-digitalisation-of-the-economy-october-2021.html (accessed March 10, 2025).
[7] CEIC, "Tax Revenue (% of GDP) – Colombia" (2024). Available from https://www.ceicdata.com/en/indicator/colombia/tax-revenue--of-gdp (accessed March 10, 2025).
[8] Datareportal, "Digital 2024: Colombia" (2024). Available from https://datareportal.com/reports/digital-2024-colombia#:~:text=This%20page%20contains%20all%20the%20latest%20data%2C%20insights%2C,in%20Colombiause%20digital%20devices%20and%20services%20in%202024 (accessed March 10, 2025).
[9] Comisión de Regulación de Comunicaciones (CRC), "Uso de Internet Móvil Alcanza Cifra Récord en Colombia" (2024). Available from https://www.crcom.gov.co/es/noticias/comunicado-prensa/uso-internet-movil-alcanza-cifra-record-en-colombia (accessed March 10, 2025).
[10] International Trade Administration, "Colombia Digital Economy" (2024). Available from https://www.trade.gov/country-commercial-guides/colombia-digital-economy (accessed March 10, 2025).
[11] Office of the United States Trade Representative, "Suspension of Tariff Action in France Digital Services Tax Investigation" (2021). Available from https://ustr.gov/about-us/policy-offices/press-office/press-releases/2021/january/suspension-tariff-action-france-digital-services-tax-investigation (accessed March 10, 2025).

It is also important to mention that the government initially promised that this would be the only tax reform during the 4-year period ending in 2026, so the political opportunity of introducing new measures to tax the digital economy (including the OECD Multilateral Convention- MLC) would be limited.

Legal framework

Law 2277/2022 introduced the SEP as a measure to counter the loss of revenue caused by digitalization and reduced times in conducting business. According to the motivation in the law,

> *"Capital-importing countries like Colombia have suffered a substantial loss in their rights to tax activities carried out by foreigners in connection with their territory. This loss is due to international norms that allow taxing foreign companies only in the presence of the so-called permanent establishment (PE), meaning when the company has a fixed physical presence and a duration of activities of at least one (1) year in the country. Amid the digitalization of the economy, physical presence and the one-year duration are not necessary to carry out very relevant activities from an economic point of view. Besides, we expect a greater reduction in the physical aspect of businesses and in the time required to carry out various activities in the future."*[12]

As mentioned above, the law also cites the limitations of the OECD Pillar 1 solution and the narrow legislative window to tax income from companies operating in the digital economy:

> *"Emerging countries, like Colombia, are the most affected by this situation. However, the solution currently offered by the international community (the so-called Pillar 1) only covers about 108 companies (with revenues above 20 billion euros annually) and only transfers the right to tax profits at a minimal percentage that represents less than 0.5% of the current revenue according to calculations by DIAN and experts. Additionally, experts currently assign a low probability to the ratification of the Multilateral Convention (MLC) that would implement the solution. Thus, if Colombia does not approve an alternative solution, it would lose the opportunity to tax the income of the digital economy."*[13]

The SEP rules were included in the tax evasion and avoidance chapter in the reform, and consist of a main rule defining the SEP, which includes a rule clarifying that income derived from the SEP is considered Colombian sourced, a rule on the collection mechanism, an anti-avoidance rule for related parties, and some provisions acknowledging that international agreements prevail over the domestic rule.

Definition

The rule defining the SEP was introduced in the tax code in article 20-3, right after the permanent establishment rule, therefore supplementing the limited scope of the permanent establishment rule. The definition of SEP, as provided in the law, is as follows:

> *"ARTICLE 20-3. TAXATION BY SIGNIFICANT ECONOMIC PRESENCE IN COLOMBIA. Non-resident individuals or entities not domiciled in the country with a*

[12] Ministerio de Hacienda y Crédito Público, "Exposición de Motivos Reforma Tributaria para la Igualdad y la Justicia Social" (2022). Available from https://cijuf.org.co/sites/cijuf.org.co/files/activos/documentos/EXPOSICION%20DE%20MOTIVOS%20REFORMA%20TRIBUTARIA-08-08-2022.pdf (accessed March 10th, 2025). Free translation.
[13] *Ibidem.*

> *significant economic presence in Colombia are subject to income and complementary taxes on income derived from the sale of goods and/or provision of services to customers and/or users located in the national territory.*
>
> *For the commercialization of goods and/or services, it will be understood that a non-resident person or entity not domiciled in the country will have a significant economic presence in Colombia when:*
>
> 1. *There is **deliberate and systematic interaction(s) in the Colombian market**, that is, with customer(s) and/or user(s) located in the national territory; and*
> 2. *During the previous taxable year or the current taxable year, they have obtained or obtain **gross income of thirty-one thousand three hundred (31,300) UVT**[14] **or more** from transactions involving the sale of goods to customer(s) and/or user(s) located in the national territory."*[15]

The proxies for a deliberate and systematic interaction in the Colombian market are contained in par. 1 of article 20-3 in the Colombian tax code:

> *"It is presumed that there is deliberate and systematic interaction(s) in the Colombian market, that is, with customer(s) and/or user(s) located in the national territory when:*
>
> 1. *The non-resident person or entity not domiciled in the country maintains **interaction or marketing deployment with three hundred thousand (300,000) or more customers and/or users** located in the Colombian territory during the previous taxable year or the current taxable year; **or***
> 2. *The non-resident person or entity not domiciled in the country maintains or establishes the possibility of **displaying prices in Colombian pesos (COP) or allowing payment in Colombian pesos (COP)**."*

These proxies are objective and verifiable with the companies' own geographical segmentation for users, in the case of the number of Colombian customers, and with the companies' websites and apps. While there are complications in calculating users with Virtual Private Network (VPN), it is also true that many companies already have technological solutions that prevent users in a specific geographical location from accessing the services or goods available in a different country. In all cases, companies should be required to maintain clear geographical segmentation policies in case of audit. It is important to note that these are usually available whenever the company is offering ads, as they are usually targeted at users located in a specific country.

As to the gross income threshold, 31,300 UVT is roughly equivalent to USD 490,000, which captures the segment beyond startups that was not captured in the Pillar 1 scope. The article further illustrates the types of services that would be included under this provision, including a catch-all for "any other service provided through a digital market" for users located in Colombia[16].

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[14] UVT (*Unidad de Valor Tributario*) is Colombia's tax value unit, adjusted annually for inflation. 2025 UVT value: COP 49,799 (equivalent to USD 12.08) - https://europortage.com/colombia-2025-minimum-wage-and-uvt-updates/

[15] Colombia, Law 2277/2022, art. 57, which introduces article 20-3 in the tax code. Available in Spanish at https://www.funcionpublica.gov.co/eva/gestornormativo/norma.php?i=199883. Free translation.

[16] *"For the provision of digital services from abroad, the following services are subject to income tax, provided the above conditions* [deliberate and systematic interaction and income threshold] *are met:*

> *1. Online advertising services. 2. Digital content services, whether online or downloadable, including mobile applications, e-books, music, and movies. 3. Free transmission services, including television programs, movies, streaming music, multimedia transmission, podcasts, and any form of digital content. 4. Any form of monetization of information and/or data of users located in the national territory and*

This list provides certainty to taxpayers with respect to digital services, which will be taxed in Colombia under the SEP provisions if the SEP definition is met. The choice of the term "from" abroad was deliberate in order to exclude services rendered abroad to traveling Colombian residents.

Collection

Article 20-3 provides an elective mechanism for the collection of the SEP tax. According to paragraph 2, non-residents may elect to register and file a tax return and pay a 3% of the total gross income from the sale of goods or provision of digital services from abroad to Colombian customers or users. The taxpayers who opt for this mechanism will be exempt from the general withholding at 10%[17]. Paragraph 6 further authorizes DIAN to issue regulations on the collection of the SEP tax.

Anti avoidance

Paragraph 3 of article 20-3 of the Colombian Tax Code establishes an obligation for related parties to aggregate the gross income and user thresholds established in the definition of Significant Economic Presence. The Colombian Tax Administration has clarified that the gross income and number of users from different related companies (as defined under the domestic definition of related party for transfer pricing purposes), will be aggregated in order to prevent the avoidance of the SEP by fragmenting users or income through the use of different companies in the same corporate group.

Treaty exception

Paragraphs 4 and 5 of article 20-3 of the Colombian Tax Code provide more clarity on the interaction between the SEP and treaty provisions, especially permanent establishment provisions in double taxation agreements (DTAs). Paragraph 4 clarifies that DTAs will prevail, which entails that services rendered and goods sold from a treaty partner will not create a significant economic presence and the traditional permanent establishment thresholds will apply. Unfortunately, Colombia's respect of past international commitments weakens the application of the SEP, as non-residents could structure their Colombian operations through a treaty jurisdiction like Spain that mostly follows the OECD model. In this case, it is highly recommended that countries review and, if necessary, renegotiate their DTAs to reflect the new nexus created by the SEP provisions.

Paragraph 5 similarly states that if Colombia enters into an agreement that prohibits SEP taxation, the effects of article 20-3 will cease after the agreement enters into force. This provision was drafted in order to demonstrate that Colombia remained committed to the OECD discussions, but the deferral of the effects until the agreement entered into force also allowed the country to levy the tax while the odds for a ratified MLC remain low or nonexistent.

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generated by the activity of such users in digital markets. 5. Online intermediary platform services. 6. Digital subscriptions to audiovisual media, including, among others, news, magazines, newspapers, music, video, and games of any kind. 7. Management, administration, or handling of electronic data, including web storage, online data storage, file sharing services, or cloud storage. 8. Online search engine services, standardized or automated, including customized software. 9. The provision of the right to use or exploit intangibles. 10. Other electronic or digital services destined for users located in the national territory. 11. Any other service provided through a digital market destined for users located in the national territory."

[17] Art. 408, Colombian Tax Code.

Formal obligations

While the SEP rules require nonresidents to file a return or accept a high withholding for payments from Colombian withholding agents, Paragraph 7 of article 20-3 of the Colombian Tax Code is clear in stating that complying with the SEP does not turn non-residents into Colombian residents. Therefore, while they will be treated as resident taxpayers for purposes of the SEP, taxpayers with a significant economic presence in Colombia will not be required to comply with other formal obligations if they do not fulfill the thresholds and conditions to become residents. This facilitates compliance by companies that do not have administrative staff or support in Colombia, which is a key aspect to guarantee the principle of proportionality in compliance obligations.

Nexus

The SEP creates a new category of Colombian sourced income. For this reason, Law 2277/2022 included an article adding the new circumstance to the list of Colombian-sourced income categories established in article 24 of the Colombian Tax Code, which now includes *"Income derived from the sale of goods and/or provision of services by non-resident persons or entities not domiciled in the country with a significant economic presence in Colombia, to customers and/or users located in the national territory, in accordance with Article 20-3 of the Tax Statute.*"

This new nexus reflects the fact that countries can choose to tax companies or individuals carrying out significant activities in their territory, even if the activities are digitalized or lack duration due to technological advances. This is indeed the original intention of the permanent establishment rules, as carrying out significant business activities in a foreign country indeed required a substantive physical presence and some degree of permanence in the territory where the customers were located.

Rate

Under article 20-3 of the Colombian Tax Code, the default rate for the SEP tax is the withholding rate for payments established in article 408 of the same code, that is, 10% of the total amount of the payment. This withholding can only be prevented if the non-resident taxpayer chooses to register and file a return. In that case, the rate is reduced to 3% of the gross income from sales and services to Colombian residents.

Tax administration

The administration of the SEP requires a team that is savvy in technology, as the evidence of a significant economic presence in absence of a PE or subsidiary is most likely to come from the digital or new technologies space. In Colombia, the auditing is performed by the international tax audit team, and the legal team is in charge of clarifying the interpretation of the rules whenever taxpayers have doubts. For instance, DIAN has issued a number of general rulings explaining, for example, the meaning of "customers" as those who pay for the goods or services while "users" are those who directly benefit or use the goods or services[18]. The use of financial reports where digital companies segment their users geographically is also useful for the administration of the SEP rules.

[18] DIAN, CONCEPTO 006363 int 618 DE 2023. Available from https://normograma.dian.gov.co/dian/compilacion/docs/oficio_dian_6363_2023.htm#0 (accessed March 11th, 2025).

Registration and compliance

Under the Colombian SEP regime, non-resident taxpayers have the option of registering with a Colombian Tax Identification Number and filing a return that includes the payment of a 3% of gross income derived from the sale of goods and services to Colombian customers and users. The return for SEP is made annually with advance payments every two months throughout the year. If the seller of the goods or services fails to choose this option, Colombian payors (which include withholding tax agents, or financial institutions and intermediaries) are required to withhold a 10% of the total payment. The payment may be made electronically in USD to a DIAN account in the United States.

Colombia also introduced VAT on B2C transactions effective July 1, 2018 whereby non-resident digital services providers are required to register and account for the VAT (KPMG, 2025). The non-resident service providers can also opt for the VAT to be withheld by payment intermediaries like credit card companies.

Challenges and success factors in implementation

As is now usual with the taxation of digital and global activities, the largest challenge comes from the limitations of unilateral application of the SEP. The fact that Colombia adopted the measure early on and alone in the Latin American region has reduced the country's competitiveness and possibly increased the value of goods and services for Colombian residents. There are no statistics to verify this statement, but it is usual practice to establish a "gross-up" clause in contracts with Colombian taxpayers, therefore effectively transferring (at least partially) the value of the tax to the user or buyer. Furthermore, the incompatibility with existing international tax rules, such as the permanent establishment in prior DTAs, makes the implementation more difficult, as companies have the opportunity of avoiding the tax by operating through subsidiaries in treaty jurisdictions.

II. INDIA

India's taxation of the digital economy: Evolution, challenges and policy shifts

India's digital economy has grown rapidly, contributing 11.74% to the national GDP— INR 31.64 lakh crore (US$402 billion)—in 2022–23, and is projected to reach 20% by 2030 (PIB Delhi, 2025). This surge is driven by a large, tech-savvy population with over 950 million internet users and 650 million smartphone owners, fueling growth in e-commerce, fintech, and digital payments (Mishra et al., 2025).

Key policy milestones such as the 2016 demonetization and the 2017 introduction of Goods and Service Tax (GST) accelerated digital adoption, mandating online transactions and compliance. To address the tax challenges of value creation in global digital markets, India has implemented a hybrid approach—combining national measures like the Equalization Levy with OECD-aligned reforms—balancing fiscal sovereignty with international cooperation.

Legal frameworks

India, leveraging its vast consumer base and digital user population, has been a frontrunner in addressing the taxation challenges of the digital economy. Under Indian tax law, non-residents are generally taxed only on income received or sourced in India, with business income taxable only if a business connection or Permanent Establishment (PE) exists. However, the unique nature of digital businesses—which rely heavily on intangibles and user data—raises complex issues around tax nexus, payment characterization, and profit attribution. In response, India aligned with OECD's Base Erosion and Profit Shifting (BEPS) Action Plan 1, which proposed three solutions: a nexus rule based on Significant Economic Presence (SEP), a withholding tax on digital transactions, and an equalization levy. Recognizing that SEP and withholding taxes would require renegotiation of numerous tax treaties, India adopted the Equalization Levy as a first step—enabling taxation of digital transactions under domestic law without the need for extensive treaty changes.

Equalisation Levy

India introduced the Equalization Levy (EL) in 2016 as a standalone tax measure outside the Income-tax Act to address the taxation challenges posed by digital businesses lacking a physical presence in India. Initially applied at 6% on B2B payments for online advertisements and related services exceeding INR 0.1 million (USD 1,500) made to non-residents, the EL was considered as a mechanism to level the tax playing field between foreign digital service providers and their Indian counterparts, without altering existing tax treaties. Unlike income tax, it was levied on the gross amount, and since it was not classified as income tax under domestic or treaty law, it did not qualify for foreign tax credits.

In 2020, its scope was widened to include a 2% levy on e-commerce operators—non-residents managing platforms for online sale of goods or services—applicable when transactions involved Indian residents or users accessing the platform from an Indian IP address. This 2% levy was payable by the e-commerce operator on consideration received or receivable, with exemptions for entities with a PE in India, services already subject to the 6% EL, or annual revenue below INR 20 million (approximately USD 235,000). Administrative obligations varied: the 6% EL was to be withheld by Indian payers, while the 2% EL was to be self-assessed by the non-resident operator.

Dual Levy Structure

Parameter	6% EL (Ads)	2% EL (E-commerce)
Collection Responsibility	Service Recipient	E-commerce Operator
Filing	Annual return by 30 June	Quarterly payments + Annual return
Penalties	100% of levy + interest	100% of levy + interest
Treaty Override	No foreign tax credit	No foreign tax credit

The trend in Equalization Levy (EL) collections in India from FY17 to FY25 reveals a steady and significant increase, particularly from FY21 onward, reflecting the growing digitalization of the economy and the expansion in the scope of the levy. Collections rose from INR 3,386 million in FY17 to INR 11,365 million in FY20, showing a gradual but consistent increase. A sharp spike occurred in FY21, with collections nearly doubling to INR 20,579 million—coinciding with the introduction of the 2% EL on e-commerce operators.

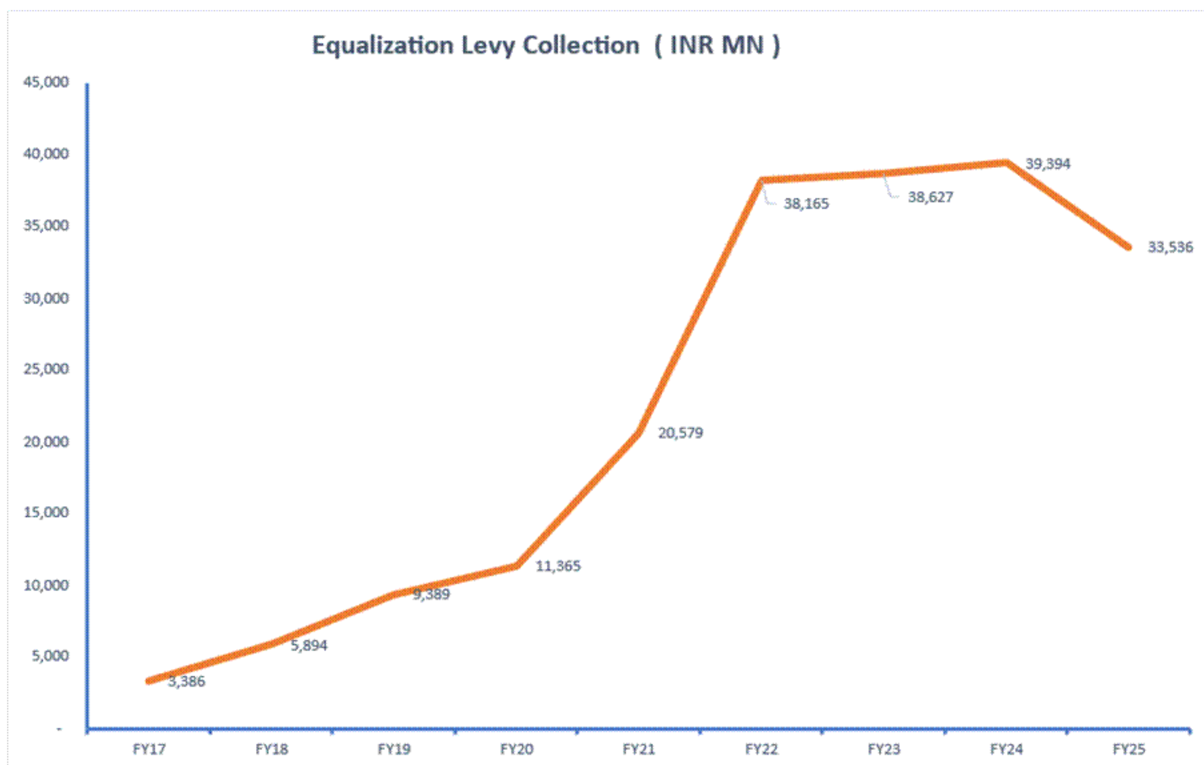


Figure 1: Equalization levy collection
Source: CBDT, Ministry of Finance

The most notable surge was seen in FY22, where collections jumped to INR 38,165 million, almost doubling the previous year's figure. This upward trend continued in FY23 (INR 38,627 million) and FY24 (INR 39,394 million), indicating a plateauing at high levels, likely due to market stabilization and improved compliance. Overall, the pattern reflects strong growth driven by policy expansion and digital market maturity, followed by an expected correction in response to impending tax reforms.

India's Equalization Levy (EL) has played a pioneering role in mobilizing revenue from the digital economy and encouraging foreign digital platforms to establish a local presence, thereby deepening their economic engagement with the country. While its implementation brought to light certain operational challenges—such as overlaps with income categories like royalty or fees for technical services (FTS), and uncertainties in coordinating with Goods and

Services Tax (GST) obligations—it also laid the foundation for more informed policymaking in this evolving domain.

Importantly, the EL highlighted the need for a more structured framework to assess the value of user data and digital contributions, which are central to digital business models. This insight positions India to lead future tax reforms that reflect the realities of digital value creation.

Despite interpretational issues, such as ambiguity around the definition of “e-commerce supply or services” and the gross-revenue basis that impacted low-margin businesses, the EL inspired global dialogue and adoption of similar measures in other jurisdictions. In response to constructive stakeholder feedback and to align with emerging international consensus, the Indian government announced in the Union Budget 2024 the phased withdrawal of the 2% EL from August 2024 and the 6% EL from April 2025.

This policy transition—reflected in a dip in FY25 collections to INR 33,536 million—signals a thoughtful shift towards a more consistent, harmonized, and globally aligned tax framework for the digital economy. It reaffirms India’s commitment to creating a balanced and future-ready tax environment that supports innovation while ensuring fair taxation.

Significant Economic Presence

As part of its evolving digital tax policy, India broadened the interpretation of 'business connection' in its domestic law by introducing the concept of Significant Economic Presence (SEP) through the Finance Act, 2018. Recognizing the limitations of traditional nexus rules in capturing value created by digital businesses, SEP was introduced to widen the tax base for non-resident entities operating in India without a physical presence. Under Section 9(1)(i) of the Income-tax Act, effective from April 1, 2022, SEP is triggered in case any transaction in respect of any goods, services, or property is carried out by a non-resident with any person in India, including provision of download of data or software in India, if the aggregate of payments arising from such transaction or transactions during the previous year exceeds INR 20 million (approximately USD 235,000), or systematic and continuous soliciting of business activities or engaging in interaction with 300,000 users in India. Finance Act, 2025 has clarified that transactions or activities of a non-resident in India which are confined to the purchase of goods in India for the purpose of export shall not constitute significant economic presence of such non-resident in India.

Once the SEP threshold is triggered, the portion of income attributable to the relevant transactions or activities becomes taxable in India. Profit attribution is carried out in accordance with domestic tax provisions, which empower the Assessing Officer to adopt the most reasonable method based on the specific facts of the case. This may involve attributing profits as a percentage of the turnover generated in India, using a proportionate method based on the ratio of Indian receipts to global receipts, or applying any other approach deemed appropriate. This threshold-based framework enables India to tax non-residents who derive substantial economic value from Indian markets, even when contracts are concluded abroad or services are delivered from offshore locations.

In addition, payments made to non-residents may be subject to withholding tax on certain types of income, such as interest, dividends, royalties, and fees for technical services. Remitters of such income often require non-residents to confirm whether they constitute a Significant Economic Presence (SEP) in India. They may also request supporting documentation, such as a Tax Residency Certificate (TRC), No Permanent Establishment (PE) declarations, and other relevant disclosures. Furthermore, the income tax return forms applicable to companies, including foreign companies, have been updated to include a specific requirement to disclose whether the entity has a significant economic presence in India.

This move aims to bridge critical gaps in the taxation of digital transactions by capturing income from digital advertising, e-commerce, and data monetization involving Indian users, while ensuring a level playing field between domestic and foreign digital entities and reinforcing India's fiscal sovereignty over cross-border digital value creation.

However, the practical applicability of SEP, being a domestic law concept, remains restricted in treaty cases, as tax treaties continue to govern the taxation of non-residents with their narrower definitions of Permanent Establishment (PE). Consequently, SEP provisions largely affect businesses from non-treaty jurisdictions or cases where treaty benefits are unavailable due to anti-abuse provisions or residency issues. Additionally, since digital business models rely heavily on intangibles and user data, requiring clear income attribution rules for SEP-based taxation, significant challenges arise in calculating taxable income and determining withholding obligations particularly concerning indirect revenue from user data or digital ads. Disputes may also occur over what constitutes "systematic and continuous" interaction, especially when servers are located outside India.

Moreover, foreign companies falling under India's SEP provisions must navigate a range of compliance obligations, including tax registration, audits, and return filings, even without a physical presence in the country. While India's SEP thresholds are intentionally set low to reflect its vast digital user base, they can sometimes lead to withholding obligations for Indian payers, with non-compliance attracting penalties and the risk of being treated as representative taxpayers. The broad scope of SEP may also inadvertently capture certain non-digital or infrequent transactions, creating compliance challenges for traditional exporters.

Nonetheless, SEP represents a progressive step in asserting India's right to tax digital value creation. Its long-term impact will be significantly strengthened through alignment with globally accepted digital tax norms, paving the way for a more consistent and predictable framework.

Withholding Tax Mechanism

India's approach to taxing the digital economy has evolved to address the unique challenges posed by cross-border digital transactions. By integrating traditional withholding tax mechanisms with new provisions designed for digital services, the country ensures that non-resident digital service providers and e-commerce operators contribute tax on income generated from Indian users, even in the absence of a physical presence. This approach includes withholding tax on various types of payments, such as royalties, fees for technical services, and interest, under Section 195 of the Income Tax Act, 1961. The tax rate depends on the nature of the payment and may be reduced under a Double Taxation Avoidance Agreement (DTAA). If no treaty applies, the domestic rates in the Income Tax Act are enforced, and non-compliance can result in penalties and the disallowance of deductions.

To address the growing influence of digital marketplaces, India introduced Section 194-O in the Income-tax Act in October 2020, which requires e-commerce operators to withhold 1% tax on the gross amount of sales or services facilitated through their platform. This provision covers both goods and services, with a threshold of INR 500,000 (approximately USD 5,800) in annual payments per individual seller. The e-commerce operator is responsible for withholding and remitting the tax, ensuring that tax is collected at the source, even when the seller is a non-resident or an unorganized entity. In addition to traditional mechanisms, taxes under the Significant Economic Presence (SEP) framework are also collected by triggering withholding tax obligations for non-residents, even in the absence of a physical permanent establishment in India.

The implementation of withholding tax provisions in India entails compliance with a range of reporting and administrative requirements. Payers are responsible for filing withholding tax returns and remitting the deducted amounts, with penalties and interest applicable for non-

compliance. Additionally, digital services attract an 18% Goods and Services Tax (GST), requiring non-resident suppliers to register and comply with reporting norms. Given that different payment categories—such as royalties, fees for technical services, and e-commerce revenues—may attract distinct withholding obligations, businesses must remain vigilant to ensure accurate compliance and avoid the risk of double taxation.

India's recent reforms reflect a constructive move toward a more globally aligned and efficient digital tax regime. The repeal of the 2% Equalization Levy (EL) on e-commerce operators from August 1, 2024, and the withdrawal of the 6% EL on online advertising from April 1, 2025, signal a commitment to simplification and harmonization. Even as these levies are phased out, the withholding tax on e-commerce transactions under Section 194-O continues to serve as a key instrument for source-based taxation. As global consensus on digital taxation evolves, India's adaptive approach to withholding tax is poised to support both compliance and effective revenue mobilization in the digital age.

Online Information and Database Access or Retrieval (OIDAR) Services

India's indirect tax framework has also evolved steadily to keep pace with the growth of the digital economy, ensuring that digital goods and services are brought within the ambit of taxation. Under the Goods and Services Tax (GST) regime, digital services provided by non-resident suppliers to Indian consumers are classified as Online Information and Database Access or Retrieval (OIDAR) services. These services are subject to an 18% GST, with non-resident suppliers required to register and comply with simplified return-filing mechanisms, even in the absence of a physical presence in India.

Additionally, India's decision to hold e-commerce operators responsible for tax collection at source (TCS) under GST has further streamlined compliance and enabled efficient tax tracking across digital platforms. This mechanism helps bring unregistered or small suppliers operating via digital marketplaces into the tax net, thereby broadening the tax base. The indirect tax framework is also supported by ongoing policy efforts to improve clarity and administrative ease, in coordination with global best practices, ensuring that taxation keeps pace with innovation while maintaining a level playing field for all market participants.

Whole-of-Government approach

In recent years, Indian tax authorities have expanded the scope of digital transactions, supported by a broader regulatory ecosystem that influences the tax implications for digital businesses. Beyond the Income Tax Act, regulatory mandates from bodies like the Reserve Bank of India (RBI), the Telecom Regulatory Authority of India (TRAI), and the Department of Telecom (DoT) contribute to shaping the tax landscape for digital players.

The RBI, through its 2018 directive, mandates that all payment system data—including transaction details, customer information, and instructions—must be stored exclusively on servers located in India. While foreign segments of transactions may be stored abroad, core data must reside within Indian jurisdiction. Similarly, TRAI's 2018 recommendations on privacy and data ownership advocate data localization by requiring telecom service providers to store subscriber data—such as call records and messages—within India to ensure data sovereignty and national security.

The DoT's Unified License Agreement further mandates telecom operators to retain all commercial and subscriber records within India, prohibiting their transfer abroad without prior approval. These requirements are reinforced by the Digital Personal Data Protection Act, 2023 (DPDP Act), which empowers the government to restrict cross-border data transfers and

mandates domestic storage of sensitive personal data by telecom firms, now designated as data fiduciaries.

Collectively, these regulations compel companies in sectors like fintech, e-commerce, telecommunications, and health tech to maintain servers in India for processing Indian user data. While the primary aim of these non-tax regulations is to ensure data security and sovereignty, they also have tax consequences indirectly. This has significant tax implications: if a foreign digital business sets up or operates servers in India to comply with these data localization rules, those servers may be treated as Permanent Establishments (PEs), thereby triggering a tax presence in India. This underscores the growing intersection between data regulation and international taxation in India's digital policy framework.

Way ahead

The taxation of digital businesses has posed persistent challenges to international tax frameworks, leading over 20 countries to unilaterally adopt digital services taxes in the absence of a globally accepted solution. Recognizing that traditional tax treaty provisions are insufficient to address the cross-border nature of digital business models, the United Nations introduced Article 12B into its Model Tax Convention. Article 12B allocates taxing rights over Automated Digital Services (ADS) primarily to the source country—where the income arises—on a gross basis, in accordance with domestic law, but subject to a negotiated cap where the income recipient is the beneficial owner and a resident of the other contracting state. This provision aims to support source states—particularly developing economies—in mobilizing domestic resources to achieve the Sustainable Development Goals (SDGs). However, Article 12B operates strictly on a payment-based mechanism, whereby income is deemed to arise in the country where the paying entity is located, rather than where the end-user or market jurisdiction lies. This limits its scope in cases where the advertiser and the target audience are located in different countries. While Article 12B is a significant development in adapting international tax rules to the digital age, further reforms are needed for it to serve as a comprehensive global standard.

To address these gaps, other treaty-based mechanism should also be explored, including the introduction of the Digital Permanent Establishment (Digital PE) concept. Under this approach, a non-resident enterprise could be deemed to have a PE in India if it maintains a significant and sustained digital interaction with the Indian economy. Criteria for this could include annual revenue from digital services, the number of active users, digital contract closures, or continuous online engagement for giving fair allocation to market jurisdictions. However, operationalizing Digital PE would require a strategic renegotiation of DTAAs, especially with key digital service-exporting nations, a process that may be both time-consuming and politically sensitive.

In tandem, existing profit attribution rules must evolve to reflect value created through user participation, data localization, and digital engagement. If the traditional arm's length principle proves inadequate, alternate methods such as fractional apportionment or formulary profit splits may be necessary.

The United Nations Framework Convention on International Tax Cooperation (UNFCITC) and the UN Tax Committee are expected to play an increasingly pivotal role in shaping international tax norms for the digital economy. Notably, the UNFCITC's workstream on the Protocol for Taxation of Cross-Border Services in an Increasingly Digitalized World seeks to address the shortcomings of legacy tax rules, which are rooted in physical presence and fixed establishments. This initiative aims to ensure that digital enterprises pay a fair share of tax in jurisdictions where they generate substantial economic value. The UN Tax Committee, formally known as the Committee of Experts on International Cooperation in Tax Matters, has

expanded its mandate to address issues like nexus redefinition, profit attribution, and the taxation of digital services. It also offers a platform to develop and refine the Digital PE framework, ensuring that developing countries are equipped with the legal tools needed to effectively tax the digital economy. Through a combination of international coordination, treaty reform, and capacity building, these UN-led efforts aim to create a fairer and more adaptable global tax system suited to 21st-century business realities.

III. KENYA

Background

Advancement in technology has changed trade and e-commerce worldwide enabling cross-border transactions. This scale without mass aspect has made it possible for businesses to transact without necessarily having a physical presence in the jurisdiction. Kenya has not been left behind in these advancements and has seen a tremendous growth in the digital economy over the last few years due to technological advancements. There has been a shift from the traditional business models to technology enabled models. Some of the new business models in Kenya include ride-hailing services, cloud kitchen, vacation rentals not forgetting trade marketplaces, fintech, streaming content, among others. These new business models are enabled by emerging technologies such as artificial intelligence, big data analytics, internet of things just to name a few.

Kenya's digital economy is rapidly evolving and has a positive impact on the country's economic development. According to a GSMA report (2024), Kenya's digital economy is projected to contribute KES 662 billion (approximately USD 5 billion) to GDP by 2028. Digital infrastructure, Data, Digital Skills, Policies And Regulations are the key enablers of the digital economy in Kenya. Kenya has had a high mobile telephony and internet penetration rate. From the Communications Authority of Kenya (CA) recent report (2025), the total number of mobile phone devices connected to mobile networks was 68.1 million, representing a penetration rate of 131.5 percent.

Statista report indicated that, the Internet penetration in Kenya is estimated to amount to 64.94% in 2025**.** Fintech innovation plays a significant role in driving the growth of Kenya's digital economy, with mobile-based financial services such as M-Pesa enabling financial inclusion. Government policies and initiatives have revolutionized the digital space with efforts to enhance digital skills and improve digital infrastructure so as to create a regulatory framework.

Growth of digital activities necessitated revenue collection and tax base expansion from this sector. Taxing the digital economy meant a new source of government revenue. Ensuring digital businesses contribute equitably to the tax base promotes fairness in the taxation system. Digital businesses have to pay a fair share of their taxes as to traditional models. Kenya enhances its economic sovereignty by aligning taxation with the digital economy's growth. As a country, there was a need to tap into and unlock the revenue potential in the digital space bringing about the introduction of Digital Service Tax.

Legal framework

Digital Service Tax (DST)

Regulatory framework governing taxation of the digital economy has seen Kenya amend its tax laws to cover digital businesses. Finance Act 2019 amended the Income Tax Act to bring to tax income accrued through a digital marketplace, subsequently defining a digital marketplace. Finance Act 2020 introduced Digital Service Tax under Section 12E of the Income Tax Act. Income Tax (Digital Service Tax) Regulations, 2020 were gazetted on 11th December 2020 spelling out the scope among others.

Digital Service Tax in Kenya is anchored in the Income Tax Act Section 12E; Finance Act 2021 excluded resident taxpayers from the provisions of DST.

The scope of services includes:

- Downloadable digital content: downloadable mobile apps, e-books, films, movies, music & online games.
- Over the Top services: streaming television shows, films, music, podcasts and any form of digital content.
- Sale of, license of or any other form of monetizing data collected about Kenyan users: generated from such users' activities on a digital marketplace.
- Provision of a digital marketplace, website or other online applications: e-commerce platforms and sharing economy e.g. taxi hailing services
- Subscription based media: news, magazines and journals.
- Electronic data management: website hosting, online data warehousing, file-sharing, cloud computing and cloud storage services.
- Provision of search-engine and automated helpdesk services: includes supply of customized search engine services.
- E-booking and E-ticketing services: online sale of tickets for attendance at live events, theatre, performance art and similar entertainment activities.
- Online distance teaching: via pre-recorded medium or e-learning, including online courses.
- Any other service provided or delivered through an online digital or electronic platform.

Income is deemed to be sourced from Kenya if the user of the digital service is located in Kenya. A user is considered to be in Kenya if:

- the user receives the digital service from a terminal located in Kenya, where terminal includes a computer, tablet and mobile phone;
- the payment for the digital service is made using a debit or credit facility provided by a financial institution or company located in Kenya;
- the digital service is acquired through an internet protocol address registered in Kenya or an international mobile phone country code assigned to Kenya; or
- the user has a business, residential or billing address in Kenya

Digital Service Tax is charged at the rate of 1.5% on the gross transaction value, determined as follows:

- For provision of digital services, the payment received as consideration for the services
- For a digital marketplace, the commission or fee paid to the digital marketplace provider for the use of the platform.

There is no revenue threshold for the transaction value. The gross transaction value is exclusive of VAT. Digital Service Tax is a final tax and where Withholding tax has been applied then DST is exempted. Frequency of payment is on or before the 20th day of the following month.

Significant Economic Presence tax

The Tax Laws Amendment Act, 2024 introduced the Significant Economic Presence Tax (SEPT) which replaced Digital Services Tax (DST) with effect from 27/12/2024. This transition and shift in Kenya's approach to taxing the digital economy forms part of the government's effort to broaden the digital tax net and offer a sustainable move to taxing the digital economy. This aligns with international best practices and global trends. Under SEPT, 10% of the gross turnover is considered taxable profit and the tax rate is 30% of the taxable profit. Effectively the tax rate is 3% of gross turnover as opposed to 1.5% of DST. Revenue threshold is an

annual turnover of more than KES 5 million (approximately USD 40,000), this threshold aspect cushions entities that do not carry out significant activities in Kenya.

Tax administration

The implementation roadmap has been successful. Initially, Digital Service Tax was applicable to both resident and non-resident taxpayers. The Finance Act 2021 brought amendments thereby excluding resident taxpayers from Digital Service Tax ambit.

Kenya Revenue Authority established a 20 staff office with the mandate to collect taxes from the digital space. The team underwent technical training for capacity building. There have been engagements with digital marketplaces for information sharing and subsequently compliance monitoring. There is continuous need for Exchange of Information through the Convention on Mutual Administrative Assistance in Tax Matters (MAAC) to assist in tax administration. Kenya has had a number of benchmarking with various tax administrations in efforts to gain insights on how to tax the digital economy.

iTax, Kenya's web-based system for revenue collection, had to be enhanced to enable collection of taxes from digital transactions. There was addition of modules to effectively and efficiently enable non-resident taxpayers account for taxes. There was need for a simplified framework.

Registration and compliance

All non-resident suppliers of digital services are required to register on iTax. The process is simplified; one is required to provide their business registration certificate that they use in their resident country, email address and telephone contacts. Upon approval, the non-resident is issued with a unique alphanumeric character called a PIN (Personal Identification Number) to be used in accounting for taxes in Kenya.

A non-resident person without a permanent establishment who elects not to register under the simplified regime shall appoint a tax representative. A tax representative shall be responsible for performing any tax obligations required of the taxpayer, including the submission of returns and the payment of taxes.

The DST tax return is a payment return whereby a taxpayer is only required to input the month's gross turnover and the system automatically calculates the 1.5% taxes on it to simplify compliance. Subsequently, the system generates a payment slip with a Payment Registration Number (PRN), a 16 digit code for the purpose of payment via bank transfer. The taxpayer can make payments via SWIFT including the PRN in the SWIFT details. There are various KRA agent commercial banks for making payments.

Compliance checks on the returns are made on a monthly basis. Discrepancies are queried and relevant documents requested for case(s) closure. Some of the enforcement measures in place include appointment of an agent for the purpose of collection and remittance of digital service tax to the Commissioner.

Some disputes on DST assessments arise from foreign exchange fluctuations. Most of the taxpayers are advised to add a little buffer when making payments to cover for this. iTax has been enhanced to allow automatic utilization of any excess funds in the next return filing.

Taxpayers with minimal sales tend to raise high administration costs as a challenge especially in terms of bank transfer charges. After a thorough desk review of such cases, some are advised to make quarterly filings to ease the burden.

Output and evaluation

Since 1st January 2021, Kenya has been able to register 415 companies. Revenue collected under Digital Service Tax/SEP obligation is KES 2.2 billion (approximately USD 15 million).

Below is a breakdown of revenue collection over the years:

Year	Revenue in KES
2021	152.5M
2022	306.7M
2023	435.3M
2024	694.7M
2025(July 2024 to March 2025)	519.5M

Source: KRA/ KNBS
(Each year is July to June. KES to USD is about 129).

There has been a positive compliance rate. Most of the taxpayers file and pay taxes on time despite time zone differences. This has been enabled by awareness creation on the need to file and pay on time. Additionally, imposition of late filing and/or payment penalties have seen the cases of noncompliance reduce.

Taxation of the digital economy has had a positive impact on Kenya's economy. There has been increased government revenue enabling development of public facilities such as healthcare, education, security and infrastructure. Revenue is a pillar for national development in Kenya. There has been economic growth which implies a rise in the country's GDP. However, there has been a negative impact as some companies have ceased operations in Kenya stating non profitability. Collection of DST has leveled the playing field, there is a fairground for both digital and traditional businesses.

Challenges and success factors in implementation

In the journey of taxing the digital economy, Kenya has faced quite a number of challenges:

Anonymity of some digital transactions has been an issue. Establishing a taxable presence for some of the digital companies has posed a challenge from their ability to operate without a local footprint. Cross jurisdictional trade without a permanent establishment makes it difficult to determine the tax nexus of given companies.

Identifying digital transactions and income for tax purposes can be hard due to their complex business models and unique features. The uncertainty can lead to wrong tax treatment and calculation of taxes. Misappropriation of tax treatment leads to tax disputes which are time consuming to resolve. There is need for technical expertise and resources to clearly characterize transactions and income for tax purposes.

There are risks of double taxation in some digital companies that could stifle investment.

Enforcement measures are quite minimal due to legislative boundaries. Some enforcement measures in Kenya cannot be applied beyond the jurisdiction to collect taxes. For instance, agency notices are not enforceable beyond Kenya's borders, thereby restricting the ability of the tax administration to compel non-resident digital service providers to honour their tax obligations. This possibly leads to intentional noncompliance.

Despite the above challenges, taxing the digital economy in Kenya has been a success. There has been up to date and precise legal framework. Due to the dynamic nature of the digital economy, Kenya has kept abreast with this by amending its tax laws to accommodate this fluid nature of the economy. There has been continuous review of the legislation to keep up with the rapid evolving changes.

There has been effective tax administration. KRA ensures timely enhancement of iTax to enable revenue collection. iTax has been simplified and all tax procedures from registration to payment of taxes are user friendly. Additionally, KRA is involved actively in international cooperation on insights on how to tax the digital economy. This is evident from the various benchmarks held and Kenya's membership in the OECD Inclusive Framework. There is continuous collaboration with international organizations and countries to address digital economy taxation challenges.

Public recognition of compliant nonresident taxpayers during the taxpayer's month[19] serves as an incentive to promote voluntary tax compliance in Kenya.

Having seen the challenges and success factors in digital economy tax administration, there is need for Kenya Revenue Authority to leverage technology to help track digital transactions and identify noncompliance. Acquisition of tools to track transactions in the digital space may act as an enforcement measure and consequently lead to more revenue collection. Utilizing data analytics to determine patterns in various digital transactions by companies could potentially curb tax avoidance and foster compliance.

[19] Taxpayer's Month is organized every October by the Kenya Revenue Administration to recognize, appreciate, and engage with taxpayers, as well as recognize compliant taxpayers.

IV. NEPAL

Background

At present, the digital economy makes up over 15% of the global GDP and is expected to contribute about 24% to the global economy by 2024, according to the Asian Development Bank (2022). The rise of digitalization has seen businesses and consumers increasingly move online, but not all countries are equally positioned to benefit. Similarly, the US and China are the front runners holding 90% of the market capitalization of the world's largest digital platforms, according to UNCTAD (2021). As a result of outdated tax rules, countries do not have the right to tax the digital economy, resulting in foregone revenue, thus creating a need for further negotiations to enforce this right in the first place. The implications of this are largely felt by growing digital economies, notably the developing countries in the Global South. Similarly, nearly 20 countries, including in South Asia, such as India, Nepal, and Pakistan either implemented or proposed some kind of Digital Service Tax (DST) or Significant Economic Presence Tax (SEPT) (Enache, 2024).

Nepal's digital economy is growing exponentially. According to the Nepal Telecommunication Authority (NTA) (2016), there was an addition of 2.25 million new internet users in 2017 alone, translating into approximately 250 new internet users every hour. As of January 2024, Nepal was home to 13.50 million social media users, equating to 43.5 percent of the total population, including 15.40 million internet users. Similarly, the growing popularity of social media such as Facebook, TikTok, and Instagram is a crucial driver for internet adoption in Nepal.

In this rapidly evolving digital development, the government of Nepal is adapting its tax policies on capturing revenue from the booming digital economy. Thus, the Finance Act 2079/80[20] (2022/23) Nepal introduced the Digital Service Tax (DST) under Section 20 of the Finance Act. This tax was designed to ensure that non-resident entities providing digital services to consumers in Nepal contribute to the country's revenue. It lays out the framework for imposing a direct tax on the transaction value of digital services provided by non-resident persons to consumers in Nepal at 2% of the transaction value of digital services. Furthermore, as per the procedure relating to Digital Service Tax (2022), the tax is imposed on a foreign company operating in Nepal that earns more than 3 million Nepalese rupees (NPR) in annual revenue. Once this threshold is crossed, the 2 percent tax is applied to the entire amount —not just the portion exceeding NPR 3 million transaction amount.

Legal framework for DST and tax administration

Nepal's adoption of the Digital Services Tax Act (DSA) has proven to be a significant step in bringing international digital service providers into the mainstream tax system. The DSA, also known as the Electronics Service Tax Procedure, regulates the tax obligations of non-resident businesses providing digital services to Nepali consumers. This Digital Service Tax (DST) is governed by the Finance Act and operates separately from the Income Tax Act; therefore, Nepal's tax treaties, which apply only to taxes under the Income Tax Act, do not override or exempt companies from DST obligations.

Further to DSA, the Nepalese government amended the VAT Act to regulate further VAT-related matters related to providing digital services by foreign digital service providers.

The Inland Revenue Department has published the second amendment of the Digital Services Act in 2024. This Act further defines and clarifies the scope of the DST provision. Also, this

[20] 2079/80 as per the Nepali calendar Bikram Sambat (B.S)

set an annual transaction up to NPR 3 million (equivalent to USD 22,351) shall not be taxed, However, if the amount exceeds NPR 3 million in a FY, the entire transaction amount shall be taxed. Additionally, this also set a fine of 0.1 percent of total transactions per year on the non-submission of a return, including a 15 percent interest charge applied on the failure to pay tax within three months after the income year.

Similarly, in terms of tax administration and collection, the Digital Service Tax is administered by the Large Taxpayers' Office. Although no specific branch or officer has been formally designated for its enforcement, the Information Technology Section and the Policy Section of the Inland Revenue Department, in coordination with the Large Taxpayers' Office, are jointly working to implement the DST.

Registration and compliance

The Inland Revenue Department (IRD) has published regulations on the implementation of the digital services tax in 2022. The guidance is included in a "procedure relating to digital service 2022," which defines key terms and explains the features of the regime. Further, this defines digital services as "services whose delivery essentially requires information technology and are provided automatically through the internet with minimum human intervention". This is further illustrated by the examples provided by the IRD, including advertising, streaming, data storage, gaming, and online marketplaces. Within this structure, taxpayers are required to register to pay the digital services tax if their turnover from covered services is greater than NPR 3 million in any fiscal year. The guidance explains that once the NPR 3 million threshold is exceeded, taxpayers will have 30 days to register with the Large Taxpayer Office (LTO) – the body responsible for administering the tax.

Additionally, an entity which is liable to pay DST shall compulsorily register and obtain the PAN[21]. Registration for PAN shall be done within 30 days of which transaction amount exceeding the threshold of NPR 3 million. Voluntary registration for PAN is permitted even if the transaction amount does not exceed the threshold limit. Entities that have already registered for VAT need not obtain a separate PAN. After receiving the application, the LTO will issue a registration certificate within seven days. However, if a taxpayer cannot be registered, the LTO will notify them within 15 days. Non-residents can also voluntarily register for the tax at any time. The guidance stipulates that digital services tax returns are required within three months of the end of the income year, and late returns will be subject to a fee of 0.1 of total transactions percent per year. It highlights penalties of 50 percent of any tax liability not declared.

The application for registration requires few important documents and steps such as the non-resident persons must provide notarized copies in English of their company registration certificate from their country of residence, tax registration identification number from their country of residence, letter relating to the authorized person designated for tax purposes and a notarized copy of the person's passport in English. They also need to provide a photo and specimen of the authorized person designated on behalf of the non-resident person. If a citizen of Nepal is designated for tax purposes, an authorized letter and notarized copies of their citizenship or passport are required. The Office should issue a registration certificate within seven days of receiving the application or inform the applicant within 15 days, along with reasons, if registration is not possible.

[21] A PAN is a unique 9-digit number issued by the Inland Revenue Department of Nepal assigned to individuals and legal entities who are required to pay applicable taxes in Nepal. Permanent Account Number (PAN) is the Official Identification Method used by the Inland Revenue Department for identification of Taxpayers in Nepal.

Furthermore, while depositing the collected digital service tax with the tax office, payment shall be made electronically under the defined revenue head within 3 months from the end of each income year. For example, for the Fiscal year (FY) 2023-24, the deadline would be within mid-October 2024. Interest at the rate of 15% per annum shall be levied and recovered on non-payment of tax within the stipulated period.

On the other hand, the taxpayer should record and submit details to the tax office. The transactions shall be recorded in Nepalese currency and shall be accounted on an accrual basis. Further, the accounting should be done as per the Nepali financial year. The format of return shall be as specified in Annexure 3 of the procedure. This is a declaration form that includes the transaction value of digital services, tax liability, and any applicable interest or late fees. It also requires sales details, including services provided to business other than Nepali consumers. The return shall be submitted within 3 months from the end of each income year via the online medium. As mentioned above, the fine shall be imposed at the rate of 0.1% per annum on the value of annual transactions if the return is not filed on time.

Output and evaluation

As of June 2025, 20 foreign companies are registered, including Apple, Google, Microsoft, TikTok, and Netflix, and have started paying the DST for providing electronic services to consumers in Nepal. This number is increasing rapidly as the number of companies registering and paying tax is growing.

According to national media outlet companies including Microsoft, Google, Adobe, Netflix, Amazon, and Apple paid NPR 410 million (approximately USD 3.1 million) in DST in fiscal year 2023-24. Also, another source shows that in fiscal year 2079/80 (2022/23), after implementing the Digital Services Tax, eight companies recorded NPR 700 million in transactions in just five months, contributing NPR 109.4 million in taxes. A single US based company recorded the highest transaction of NPR 1.31 billion, paying the largest share of taxes. These companies provide digital services like advertising, cloud services, OTT *(over-the-top*) platforms, software, and more.

From the current fiscal year 2081/82 (2024/25), companies with annual transactions exceeding NPR 3 million (raised from NPR 2 million) are required to pay Digital Services Tax and VAT.

As of today, only non-resident digital service providers are required to pay digital service taxes (DST) in Nepal. However, amendments to the DST provisions and the VAT Act, introduced through the Finance Ordinance 2025, now require non-resident persons to pay tax on income derived from targeted online advertisements and the sale of user data.

The sale of user data and its use in targeted online advertising is a widespread practice in which companies collect, analyze, and often sell personal information to deliver personalized ads. With these changes, it is expected that the scope of Nepal's DST will expand and revenue collection will increase.

Challenges and success factors in implementation

Nepal adopted the Digital Services tax (DST) in early 2022 and made the second amendment in 2024/2025. As of June 2025, 20 companies are already registered. This is already a considerable change since the inception of the DST. However, the implementation process is not as smooth as expected. Just a few weeks ago, the Nepalese Minister for Communication and Information Technology issued an ultimatum to major tech companies, demanding that

they register and fulfill their tax obligations. This situation also underscores the disregard shown by some of these companies in failing to comply with the legal framework. Although the government has enacted laws aimed at bringing such companies into the tax system, the majority continue to operate outside of it.

Additionally, the effective regulatory framework needs to be strengthened to address the current challenges. Proper legislation and guidelines are essential in implementing these policies. Furthermore, building the capacity of the government agencies is another important factor. This would be further enhanced if the government could create a special task force for DST. Also, it is understandable that a lot of companies are not physically present on the ground; thus, it is hard to regulate. Additionally, a proper and secure digital public infrastructure and connectivity would help. Also, recognizing publicly those companies that contribute the most would eventually inspire others to do the same as well.

As the country's development aspirations continue to grow, it is essential to expand the tax base and increase revenue to finance these goals. With the rapid acceleration of digital activities, the Digital Services Tax (DST) is expected to serve as a strong foundation for revenue generation. It is anticipated that the amount collected through DST will increase substantially in the coming years. Thus, there is an urgent need for the Inland Revenue Department to form a special task force to work on DST implementation, leverage the available digital tools and technology to enforce compliance. The journey ahead may be challenging, but with collaborative initiatives, Nepal must realize its full potential and leverage the digital economy.

V. NIGERIA

Background

Globalisation and digitalisation have not only advanced international trade, but also exposed gaps in tax systems. Base Erosion and Profit Shifting (BEPS) provides opportunity for multinational enterprises to shift profits to low-tax jurisdictions hosting little or no economic activity. BEPS causes an estimated $100–240 billion annual losses in global corporate tax revenue, according to OECD (2025).

In response, the OECD and G20 launched a 15-Action Plan in 2013 to curb BEPS and modernise international tax rules. Nigeria joined the BEPS initiative in 2014 and adopted several reforms based on the BEPS reports.

With about 200 million people and 55% internet penetration, Nigeria is one of Africa's fastest-growing digital markets. The rise in foreign digital service providers and ineffective taxation of income generated from cross-border transactions prompted the country to update her tax framework in order to ensure fair taxation of all economic activities.

Action 1 of the BEPS Plan directly addresses these digital economy challenges, promoting inclusive collaboration to reshape global tax norms.

Implementation framework

Nigeria, like every sovereign nation, has the right to design her tax policy framework, as well as enact her own tax laws with respect to economic activities within her jurisdiction.

Following the BEPS initiative, Nigeria's domestic efforts to address the tax challenges of the digital economy began in earnest in 2017 with the establishment of the BEPS Implementation Committee to review the BEPS outcome and provide recommendations to government on implementation.

Recognising the disruptive nature of digitalisation on traditional tax rules, the Committee adopted a strategic three-pronged approach: Policy Framework, Legislative Framework, and Administrative Framework.

Policy framework

Recognising that Nigeria's tax system is rooted in traditional business models, the Policy Framework sought to reform this. A key element was the development of a domestic framework to exercise taxing rights over all business activities howsoever carried on in Nigeria. This framework was designed to target both direct tax (an income tax nexus rule based on Significant Economic Presence (SEP)) and indirect tax (a simplified registration and compliance regime for VAT collection on cross-border digital transactions).

The income tax nexus rule was designed to serve as an interim measure, while Nigeria actively participates in the OECD/G20 Inclusive Framework global measure against the tax challenges of the digitised economy, which was to advocate for fair global digital taxation rules under the two-pillar unified approach.

Regarding the indirect tax approach, the policy approach was intended to revise the extant Value Added Tax (VAT) legislation in a way that addresses the challenges posed by cross-

border transactions, and to improve alignment with international norms, particularly the OECD VAT/GST guidance.

Legislative framework

The Legislative Framework was established via the Finance Acts (2019-2021). The Finance Acts amended relevant tax laws and established SEP nexus test for the taxation of income derived from Nigeria. The SEP rule defines the tax nexus based on economic test; it shifted from purely physical presence test to economic presence.

The 2020 SEP Order detailed taxable economic activities and relevant turnover thresholds. The Personal Income Tax Act (PITA) was also amended, to include SEP rules for income derived by non-resident individuals from cross border remote services.

The VAT Act was amended to require non-resident suppliers to register and remit VAT.

Administrative framework

The Administrative Framework involves the establishment of the Non-Resident Persons Tax Office (NRPTO) by the Nigerian tax authority to simplify administrative processes for non-resident persons and to customise administrative processes for non-resident persons for ease of compliance.

In addition, a fully digital tax platform was deployed to enable online registration, tax returns filing, and tax payment.

The SEP Regime

Scope

Nigeria's SEP regime targets economic activities carried out in Nigeria without physical presence. The scope of activities covered in the SEP Order include:

i. Streaming or downloading content (e.g., films, music, apps, e-books).
ii. Transmitting user data from Nigerian residents.
iii. Selling goods or services via digital platforms to Nigerian customers.
iv. Providing intermediary services connecting Nigerian buyers and sellers.
v. Furnishing professional, technical, consultancy, or management services to Nigerian residents, or permanent establishments or agents of foreign entities based in Nigeria.

For these set of activities, the SEP Order sets minimum annual revenue threshold of **NGN 25 million** or its equivalent in other currencies to constitute a digital footprint for taxable nexus in Nigeria.

In addition to the turnover threshold, other non-quantitative factors include:

(i) uses the domain name (.ng) or registers a website address in Nigeria; or
(ii) has a purposeful and sustained interaction with persons in Nigeria by customising its digital page or platform to target persons in Nigeria, including reflecting the prices of its products or services in Nigerian currency or providing options for billing or payment in Nigerian currency
.

The following payments are exempt from the SEP rules:

i. payment received by an employee as remuneration or compensation under a contract of employmentpayments for teaching services through a Nigerian educational institution, or
ii. payments by Nigerian companies from their fixed bases or permanent establishments located in other countries.
iii. The Nigerian SEP rule does not apply to companies that are resident of jurisdictions with which Nigeria has entered into a bilateral or a multilateral tax agreement containing a consensus-based arrangement to address tax challenges arising from the digitalisation of the economy.

Tax rates and profit attribution

Profits of entities covered under the Nigeria's SEP regime are taxed at standard Companies Income Tax (CIT) rates i.e.:

- 0% for revenue below ₦25 million,
- 20% for revenue ₦25m – ₦100 million, and
- 30% for revenue above ₦100 million.

Where the taxpayer has not filed income tax returns, or there are complexities in attributing profits in certain circumstances (including in digital transactions), Section 30 of CITA allows the tax authority to deem a "fair and reasonable" percentage of the turnover generated from Nigeria by the entity as profit. In order to enhance clarity in the implementation of this provision, benchmarks such as group profitability ratios, EBITDA (earnings before interest, taxes, depreciation and amortization) -based proxies, and turnover-based assessments may be used.

For management, technical, professional, or consultancy services provided by non-residents, the withholding tax applicable is 10%. The withholding tax is the final tax where the entity does not have taxable presence in Nigeria.

Features of the SEP Regime

1. **Not a separate tax or unilateral measure**: Nigeria's SEP is not a separate tax, but a nexus rule for the purpose of income tax. The regime modifies nexus rules that serve as proxies for income tax under the income tax laws.
2. **Broad application**: SEP covers digital sales of physical goods, digital goods (software, e-books, apps, etc.) and digital services (streaming, consultancy, cloud solutions, data monetization).
3. **Integral part of extant corporate income tax:** SEP falls within Nigeria's corporate tax framework and not a standalone or a new tax type.
4. **Treaty protection**: Residents of treaty partner-countries are exempt unless otherwise provided in the relevant agreement.
5. **Net basis taxation**: The Nigerian SEP taxes on net basis, and not gross basis.
6. **Profit allocation**: No separate profit allocation rule is provided in the law for income generated through SEP. Rather, the taxpayer computes its profits in accordance with the tax rules.
7. **Self-assessment returns**: A taxpayer is required to file its true and correct self-assessment income tax returns. Where this is not done, the tax authority may deem a fair and reasonable percentage of the turnover generated from Nigeria as profits for tax purposes.

Tax administration reforms in Nigeria to implement SEP

Structural reforms

Nigeria established the following specialised functions:

1. Non-Resident Persons Tax Office (NRPTO) to the tax affairs of foreign entities that are operating in Nigeria.
2. Competent Authority Department: Oversees Nigeria's tax treaty obligations, resolves double taxation disputes, coordinates international tax policies, and facilitates international tax cooperation.

These functions work together to enhance tax certainty, reduce disputes and aid voluntary compliance.

Capacity building

The increasing complexity of tax challenges of the digitalised economy has necessitated continuous capacity building. Nigeria's tax authority has invested heavily in upskilling its workforce through:

1. Technical training on international tax frameworks (focusing on BEPS reports and OECD guidelines).
2. Workshops and certifications in digital auditing, data science, and forensic accounting.
3. Collaborations with international tax organisations (like ATAF, OECD, and WATAF) to ensure adherence to global best practices.

IT system (automation)

The tax authority deployed several tech-driven tools, such as:

1. TaxPro Max: A locally developed platform enabling seamless tax registration, filing, payments, and automatic crediting of withholding tax.
2. Automated VAT collection mechanisms, particularly for non-resident digital suppliers.

Implementation processes

Registration and filing

1. Non-resident companies that meet the specified thresholds for SEP are required to register with the FIRS via the TaxPro Max platform. This platform allows remote registration globally, and issues Tax Identification Number (TIN) to registered persons within 48 hours.
2. Registered taxpayers file returns and pay taxes online in major currencies through the digital tax administration platform.

Collection mechanisms

1. Digital service providers must do self-assessment, file tax returns appropriately, and remit the tax.
2. For entities that are not registered, FIRS may require Nigerian corporate clients to deduct and remit the tax when paying foreign providers.

Compliance monitoring

1. **Tax Returns Filing**: to improve compliance, the tax authority may leverage on transaction information or advertising data to identify entities that are required to file returns in Nigeria.
2. **Tax Audits**: Traditional audits are challenging due to the lack of direct access to foreign company records.
3. **Dispute Resolution**: dispute prevention and resolution follow Nigeria's corporate tax framework, which outlines steps before litigation, and litigation process through the Tax Appeal Tribunal (TAT) and the Courts.
   The process begins with a Notice of Assessment from the FIRS to the taxpayer; where the taxpayer disagrees, it has 30 days to file a Notice of Objection (NOO) detailing grounds of objection and providing supporting documentation. FIRS may uphold, revise the assessment and issue a revised assessment, or refuse to amend the assessment and issue a Notice of Refusal to Amend (NORA). A dissatisfied taxpayer may appeal to the TAT which is an independent body set up under the law to resolve tax disputes. Further appeals can be made to the Federal High Court and beyond.

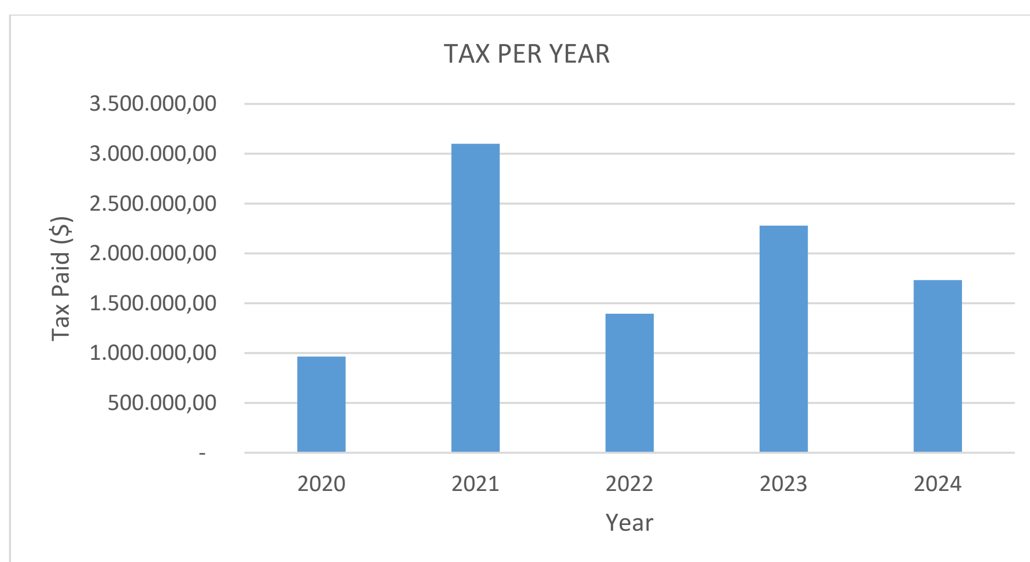
Output and evaluation

Companies registered

There has been a steady increase in the number of digital companies registered for tax purposes in Nigeria, growing from an initial count of just 20 companies in the early stages to about 40 registered entities by the end of 2024.

Revenues collected

Tax collected from year 2020 to 2024 is as shown in the figure below:



Source – FIRS

The reported revenue above is based solely on self-assessed returns by companies.

Challenges in implementation

While the SEP policy reflects strong political will and innovation, its implementation has been hampered by the following legal, structural, and administrative challenges.

i. Legal and Institutional Gaps: A key issue is the lack of specific profit attribution rules for digital presence in Nigerian law thereby hindering effective tax assessment.
ii. Low Revenue Yield and Attribution Challenges: Despite SEP, revenue is low due to the existing profit allocation rules under the transfer pricing guidelines (based on traditional Functions, Assets and Risks (FAR) analysis which ignore the value of users' contribution), as well as the difficulty in valuing user contributions to digital businesses. This allows formal compliance, but with minimal tax contribution.
iii. Treaty-Related Limitations on SEP Enforcement: the SEP rule doesn't apply to entities from Nigeria's tax treaty partners thereby limiting its scope.
iv. Difficulties in Treaty Renegotiation and Legislative Reform: Renegotiating treaties for digital taxation is complex and slow.
v. Access to data: limited access to global data-sharing networks, limited data-sharing agreements with tech companies and lack of visibility of cross-border payments; especially for individual users and small businesses transacting via mobile payments or credit cards, hinder revenue tracking, leading to lower-than-expected collections. Automated customer service systems often block direct access to the companies.
vi. Compliance and Enforcement Constraints: there is structural and capacity challenges in enforcing compliance from digital giants, occasioned in part by lack of international enforcement frameworks and cooperation.

Success factors in implementation

Despite the various challenges, several factors have contributed to Nigeria's relative progress in the implementation of the SEP rule:

a. Political Will and Institutional Innovation: The Nigerian government has shown strong commitment to SEP rules, with tax authority driving digital tax reforms and improving compliance mechanisms.
b. Stakeholder Engagement: Collaborations with stakeholders monitoring digital transactions, serving as indirect enforcement tools.
c. Alignment with Global Trends: Nigeria's SEP regime is consistent with relevant international rules. This global alignment may facilitate future collaborations and treaty reforms.

Future outlook and strategic priorities

To deepen the effectiveness of SEP enforcement and secure sustainable revenue from digital activities, Nigeria is actively pursuing a set of forward-looking strategies:

i. Strengthening International Cooperation: Nigeria will leverage on Exchange of Information and CbCR (Country-by-Country Reporting) data, along with Multilateral Tax Administrative Assistance frameworks, to enhance tax compliance.
ii. Deepening Collaboration with Domestic Agencies: The tax authority will enhance collaboration with regulatory agencies in the technology sector and financial regulators for improved access to data on digital operations and revenue flows.
iii. Building a Technology-Enabled Compliance Infrastructure.

Conclusion: Reclaiming taxing rights in a digital economy

Nigeria's SEP regime marks a positive step toward reclaiming taxing rights in the digital economy. Despite the challenges, Nigeria is reforming its laws, strengthening domestic collaboration, and embracing global tax transparency tools for improved access to data.

VI. TANZANIA

Background

Before the introduction of DST, Tanzania's tax policy struggled to capture revenue from its digital economy. Under traditional tax rules, a foreign company's income is taxable in Tanzania only if the company has a local taxable presence (a "Permanent Establishment"). Digital services are typically provided remotely, so non-resident service providers with no permanent establishment pay no income tax on profits from Tanzanian users. While Tanzania's Income Tax Act required withholding tax on certain payments to non-residents, those rules did not effectively cover digital services to consumers (B2C transactions). In particular, individual Tanzanian consumers were not obligated to withhold tax on payments to foreign e-service providers (an outcome reinforced by Section 83(2) of the Income Tax Act, which exempted personal payments from withholding) (United Republic of Tanzania (URT), 2004). This meant that if a Tanzanian person purchased, for example, an online subscription or advertising service from a non-resident company, that payment which is sourced from Tanzania, could leave the country untaxed. Resident service providers, on the other hand, were subject to local taxes (like corporate income tax and VAT), putting them at a competitive disadvantage in terms of pricing. This imbalance and erosion of the tax base motivated the government to consider a new approach.

The domestic digital sector in Tanzania has local startups and telecom-driven services, but foreign providers have captured a significant share of the market, according to GSMA (2022). The introduction of a digital services tax in Tanzania was driven by the need to level the playing field between foreign and local service providers and to capture revenue from the growing digital marketplace. The government recognized that significant economic value was being generated in Tanzania by digital platforms without corresponding tax contributions. DST was part of efforts to "generate revenue from the rapidly growing digital economy, driven by increased internet and smartphone usage" [as stated in the 2022/23 budget speech] (URT 2022a). It aimed to ensure that non-resident companies pay a fair share tax on income earned from Tanzanian users, just as local companies do. In essence, DST would allow Tanzania to tax a portion of the income from online services accessed within the country, thereby recouping some income that previously escaped taxation. By implementing a DST, Tanzania sought not only to boost tax collections but also to create a fairer market environment where foreign e-service providers do not undercut local businesses simply because of tax avoidance. The Tanzania DST is thus grounded in both revenue needs and principles of tax equity as suggested in best practices (ATAF, 2020).

Legal framework

Tanzania's DST regime was established through amendments to existing tax laws, rather than a standalone law, and took effect in mid-2022. The Finance Act, 2022 introduced key changes to the Income Tax Act (Cap. 332) and the Value Added Tax Act (Cap. 148) to provide the legal basis for taxing digital services (URT 2022b). Precisely, the Finance Act 2022 inserted Section 90A into the Income Tax Act, creating an obligation for certain non-resident service providers to pay income tax on their digital services income. It also added Section 69(m) to define such income as having a source in Tanzania when paid by local users. Initially, the law limited the scope to services provided through a "digital marketplace" defined as any electronic platform enabling direct interactions between buyers and sellers of services (URT 2022b). In essence, Section 90A(1) required that a non-resident person providing electronic services to a person in Tanzania (who is not conducting business) must pay a digital services tax at 2% on the gross payment received. This established DST as a gross-based income tax on digital

services, separate from normal corporate income tax. Notably, the wording targeted payments by individuals not conducting business, thereby focusing the DST on B2C (business-to-consumer) transactions.

The following year, the Finance Act, 2023 refined the DST provisions. An amendment to Section 90A expanded the DST's scope "to include all electronic services, rather than limiting it to those provided through digital marketplaces" (URT 2023). This change closed any loophole wherein a digital service might claim not to be a formal marketplace; now any electronic service provided to Tanzanian users by a non-resident is within the ambit of DST. The 2023 amendment also adjusted some administrative details (as discussed later, it aligned return filing dates with the VAT schedule). Together, the 2022 and 2023 Finance Acts ensure that any revenue earned online from Tanzanians by a non-resident is either subject to DST or covered by other tax mechanisms.

In addition to income tax law changes, the VAT Act was amended in 2022 to bring digital services into the VAT net. Finance Act 2022 introduced Section 64(5) in the VAT Act, allowing non-resident electronic service providers to register for VAT without a local tax representative. This enables foreign vendors to charge and remit Tanzanian VAT (18%) on digital services sold to Tanzanian consumers (URT 2022b). The VAT Act was thus synchronized with the DST law: both taxes apply to the same transactions (DST on income and VAT on consumption). However, the VAT mechanism distinguishes business vs. consumer customers: if the Tanzanian customer is VAT-registered (a business), the law uses a reverse charge (the local business self-assesses the VAT), whereas if the customer is not VAT-registered (an individual), the non-resident supplier must collect and remit VAT. This mirrors the DST focus on non-business customers (ATAF, 2020).

To operationalize these legal changes, the Minister of Finance exercised the authority under Section 90A(3) to issue detailed regulations. Two key Government Notices were published in late 2022: *The Income Tax (Registration of Non-Resident Electronic Service Providers) Regulations, 2022* (GN No. 478 of 2022), and *The Value Added Tax (Registration of Non-Resident Electronic Service Providers) Regulations, 2022* (GN No. 479 of 2022). These regulations (collectively called the "Electronic Service Providers Regulations") outline how non-resident providers should register, file returns, and comply with DST and VAT obligations (URT 2022c). For instance, Regulation 4 of both sets of rules requires eligible non-resident providers of electronic services to apply for tax registration online with the Tanzania Revenue Authority (TRA)'s Commissioner General. The regs also clarify definitions and procedures, ensuring the new taxes are administered under Tanzania's existing tax administration framework.

A notable feature of Tanzania's DST regime is that it excludes B2B transactions, focusing solely on business-to-consumer digital services. This is by design. Since payments by Tanzanian businesses to non-residents were already subject to withholding tax under pre-existing law, DST was crafted to complement, not duplicate, those rules (URT 2004). Under Section 83(c) of the Income Tax Act, if a Tanzanian company or organization pays a service fee to a non-resident, it must withhold 15% of the gross payment as tax and remit that to TRA. This withholding tax (WHT) applies to many services, including technical, professional, and managerial services performed in or for Tanzania. For example, if a Tanzanian firm pays an overseas software company for enterprise software or cloud services (a B2B transaction), the Tanzanian firm is required to deduct 15% WHT from the payment. In such cases, the new 2% DST does not apply, because the transaction is being taxed through the withholding mechanism. The DST law explicitly targets payments from individual consumers, which were previously untaxed. This bifurcated approach avoids double taxation: a digital service sale to a Tanzanian business triggers WHT (15%) but no DST, whereas a sale to a Tanzanian individual triggers DST (2%) but no WHT.

Tax administration

Implementing the DST regime required significant administrative preparation by the Tanzania Revenue Authority. In late 2022 and early 2023, TRA formed a dedicated Digital Economy taskforce to design and roll out the new tax. This internal team, initially composed of about six officials with expertise in economics and tax policy, legal, IT systems, and tax management, was later expanded to about ten members as the project gained momentum and being recognized in the new TRA structure with effect from mid-2023 (TRA 2023a). The team's mandate was to establish the processes, technology, and stakeholder engagement needed to enforce DST and related VAT on electronic services. Given that Tanzania was preceded by few countries in the region to implement a DST, the TRA team actively sought to learn from other jurisdictions. Team members participated in training sessions and benchmarking visits to revenue authorities in Kenya and Nigeria to gather best practices on taxing digital businesses (ATAF, 2021). This peer learning helped TRA avoid pitfalls encountered elsewhere and adapt successful tactics to the Tanzanian context.

A major focus of administration was developing an IT system to handle non-resident taxpayer registration, filing, and payment. TRA's existing electronic tax system was extended to accommodate foreign digital service providers who often have no local presence or representative. By late 2022, TRA had built a Simplified Online Registration Portal specifically for non-resident electronic service providers. The portal allows a non-resident to remotely register for a Taxpayer Identification Number (TIN) and VAT registration entirely online (TRA 2022a). By the end of 2022, the online portal went live for general use, and TRA issued a public notice on 30 December 2022 informing non-resident digital service providers of their obligation to register and start filing returns (this coincided with the law's effective dates) (TRA 2022b). A user manual was published on the TRA website to guide taxpayers step-by-step through the registration and return filing. The manual covers how to create an account, submit company information, and file monthly DST/VAT returns. This guidance was crucial, as many companies were unfamiliar with Tanzanian tax procedures.

The rollout timeline was phased to ease compliance. DST filings were required starting with July 2022 transactions (since the law took effect on 1 July 2022), while VAT filings were effectively required a few months later (the first VAT return for digital services was for January 2023, due by February 2023) (URT 2022b). TRA granted a grace period such that penalties and interest for late filing in the initial months were waived, acknowledging that many companies were still onboarding to the system. This approach of education-first, enforcement-later helped bring companies into compliance voluntarily. By January 2023, the registration portal and online return system were fully operational, and TRA began receiving monthly DST and VAT returns from non-resident taxpayers (TRA 2023b).

Registration and compliance

Tanzania's DST and VAT on electronic services regimes are administered through a simplified online portal, supported by user guides that make registration accessible for non-resident providers (TRA 2022a). Initially, monthly returns and payments were due by the 7th of the following month, but this deadline was extended to the 20th through the Finance Act 2023, aligning with domestic VAT cycles and allowing more time for foreign entities (URT 2023). Registered providers must submit monthly electronic returns declaring gross revenue from Tanzanian users, on which a 2% DST and 18% VAT are calculated. Payments are made via bank transfer using a system-generated control number. Non-resident providers are exempt from using local EFDs and may submit their own system invoices for record-keeping. No input VAT credits are permitted for these taxpayers (TRA 2022a).

TRA monitors compliance by reviewing monthly filings and flagging late submissions. In the early phase, a facilitative approach was taken, focusing on reminders and guidance rather than penalties. From 2024 onward, enforcement efforts increased, with penalties prescribed for late filings, underreporting, or willful non-compliance. Given the cross-border nature of the tax, enforcement depends heavily on cooperation and education. TRA maintains a helpdesk and regularly engages providers through webinars and direct outreach to clarify DST and VAT obligations (TRA 2023a).

Voluntary compliance has been encouraged through streamlined registration and taxpayer support. Large digital firms complied early, while identifying and nudging smaller platforms required more effort. TRA cross-checks app stores, consumer reports, and payment data from financial institutions to identify unregistered providers. From July 2024, TRA began formal DST audits, comparing declared revenue with external indicators. Although no major disputes have arisen, a clear appeals mechanism is in place (TRA 2024).

Overall, the compliance strategy blends simplified procedures, education, and credible enforcement, recognizing that for non-resident firms with no local presence, cooperation is more effective than coercion. Continued outreach and adaptive enforcement remain essential to sustaining compliance.

Output and Evaluation

Since its introduction in mid-2022, Tanzania's Digital Services Tax (DST) and the associated VAT on electronic services have expanded the national tax base, generating steadily increasing revenues from previously untaxed digital transactions. The number of registered non-resident digital service providers has grown markedly over time, reflecting improved coverage and enforcement. From just a few initial registrations in late 2022, TRA reported 33 compliant providers in 2023, increasing to 138 by January 2024 (TRA 2023a). This momentum continued, with an additional 58 providers registering in 2024 and 53 more in the first three quarters of 2025, bringing the cumulative total to 144 by Q3 2025. These registrants represent a diverse range of services, including streaming, software, e-commerce, and online travel, signaling broad engagement with the digital economy.

Revenue collections followed a similar growth trajectory. In the 2022/23 fiscal year (covering July 2022 to June 2023), the TRA collected approximately TZS 0.914 billion from DST and VAT on digital services (TRA 2023a). This modest figure reflected initial implementation challenges and partial-year operations. However, collections surged in 2023/24, reaching TZS 20.49 billion, driven by a rising number of compliant entities, increased digital consumption, and stronger compliance mechanisms. Notably, between July 2023 and January 2024 alone, digital tax revenues amounted to TZS 20.06 billion, signaling enhanced system maturity (TRA 2024).

As of March 2025, total cumulative collections had reached TZS 48.16 billion (approximately USD 17.88 million), revenue that would have otherwise remained untapped prior to the regime's establishment (TRA 2025). While the digital taxes still represent a small share of Tanzania's total tax revenue, they provide a meaningful and growing contribution, sourced primarily from previously unregistered foreign providers.

Disaggregating the collections reveals that VAT, at 18%, accounts for the majority of the revenue, while DST, at 2% on gross receipts, constitutes a smaller but important portion. In 2023, DST contributed approximately 22.5% of total digital tax revenue, declining slightly to 17.0% in 2024, and rebounding to 21.1% by Q3 2025. These fluctuations likely reflect shifts in customer composition—particularly between B2C and B2B consumption—and the expansion of taxable transaction volumes. On average, DST comprises 20% of total digital tax

collections. Although smaller than VAT, DST represents an entirely new revenue stream, capturing income that was largely beyond the reach of tax authorities prior to the 2022 reforms.

Challenges and success factors in implementation

While Tanzania's Digital Services Tax regime marks a major step in taxing the digital economy, it faces several implementation challenges. A key hurdle lies in identifying non-resident digital service providers, particularly smaller platforms without a physical presence. TRA relies on internet research, consumer tips, and cross-border cooperation to locate such entities. Strengthening data sharing with other tax authorities and collaboration with national regulators like *Tanzania Communication Regulatory Authority (TCRA)* could enhance detection. Enforcement also remains limited, as foreign entities with no local assets are difficult to compel. TRA primarily relies on voluntary compliance, reputational incentives, and the implicit threat of market exclusion. Future improvements may include bilateral cooperation and participation in global digital tax frameworks.

Auditing and verifying tax compliance is another complex task. TRA depends heavily on self-reported revenue data, with limited access to third-party records like subscriber numbers or transaction volumes. Strengthening audit capacity through digital economy training and data analytics is a key success factor. Payment issues also persist, especially for small platforms unfamiliar with international remittance processes. Currency conversion risks and system downtimes have also posed obstacles, though recent administrative reforms, such as flexible deadlines have helped improve compliance.

Taxpayer readiness and awareness remain uneven. Some digital firms, particularly medium-sized ones, were unaware of their obligations or struggled to adapt systems to comply with DST and VAT on electronic services. TRA's proactive taxpayer education, flexible enforcement, and ongoing industry engagement have proven effective.

Tanzania’s approach has evolved beyond B2C services. In 2024, the government introduced a 5% withholding tax on resident digital content creators and a 3% withholding tax on digital asset transactions. These measures aim to close gaps in the digital tax base. Overall, Tanzania’s experience underscores the importance of adaptability, cross-agency coordination, and stakeholder engagement in building an effective and sustainable digital taxation system.

In conclusion, Tanzania’s DST regime has made impressive strides in a short time, becoming a case study for other developing countries seeking to tax the digital economy. The success factors behind this achievement include strong political will, a clear legal framework, investment in administrative infrastructure, and engagement with stakeholders. The TRA’s agility in adjusting rules (such as moving filing deadlines) and its creation of a specialized unit are indicative of a responsive administration, which bodes well for the future. On the other hand, challenges like cross-border enforcement and the ever-evolving nature of digital services mean that the DST regime will require continuous attention and adaptation. Continued capacity building, international cooperation, and dialogue with the digital industry will be critical to sustain and improve this regime.

CONCLUSION

The rapid digitalization of the global economy has transformed how businesses operate, enabling firms to scale across borders without establishing a physical presence. The size of the digital economy continues to grow and is estimated to vary between 4.5% and 15.5% of global GDP (UNCTAD, 2019, pp. 48, 69). The digital revolution has created economic opportunities, but has also exposed weaknesses in current tax rules. Current tax rules fail to establish a tax nexus with market countries and do not capture the value created in those markets.

Many digital companies earn significant revenue in market jurisdictions globally without a physical presence. Their business models rely on intangible assets which are highly mobile, user data, and user participation. As a result, they often pay little or no tax on profits generated in market jurisdictions while traditional businesses remain fully taxed (Aslam & Shah, 2021; European Commission, 2017; Fair Tax Foundation, 2025). This results in unfair competition and revenue losses for market jurisdictions, underscoring the urgent need to reform traditional tax rules and adopt targeted measures for taxing the digital economy.

Current tax rules emphasize supply-side activities and physical presence, overlooking market-based contributions such as user participation, data, and local infrastructure (Singh, 2018; Devereux & Vella, 2018; Hongler & Pistone, 2015). This results in digital firms generating significant profits in market jurisdictions while paying minimal taxes. The benefit principle and economic allegiance support source-based taxation, as digital companies derive substantial advantages from public goods in user jurisdictions. Moreover, the digital economy generates location-specific economic rents due to low marginal costs and scalability, which remain largely untaxed (Cui & Hashimzade, 2019).

Countries responded to the tax challenges of the digital economy through national measures and multilateral initiatives. The OECD's 2015 BEPS Action 1 Report identified three options to address the taxation challenges of digital economy: redefining nexus to include a SEP, withholding tax on digital transactions, and applying an equalisation levy (OECD, 2015). While these proposals were not fully incorporated into Pillar One's Amount A, they influenced a wave of national measures, including DSTs, SEPs, and equalisation levies in countries such as India, Nigeria, and Kenya. OECD Pillar One's Amount A final design took a narrower approach, targeting only a limited number of the largest and most profitable MNEs, and has since stalled due to lack of global consensus. Studies show that developing countries would gain more revenue from DSTs than from the narrow reallocations under Pillar One's Amount A (Starkov & Jin, 2024).

Under the UN framework, Article 12B of the UN Model Tax Convention provides for source taxation of automated digital services on a gross or net basis. Though not yet adopted in treaties, it aligns more closely with the needs of developing countries. The early protocol on Taxation of cross-border services in a highly digitalized economy under the UNFCITC provides another platform for countries to streamline the taxation of the digital economy.

Comparative country practices

Countries like Colombia, India, Kenya, Nepal, Nigeria, and Tanzania have adopted DSTs, SEPs, or both. This paper has explored how they have implemented national digital tax measures. The table below provides a summary of key features:

Table 1: Country practices

Country	Type of Measure	Tax Rate	Scope	Threshold / Nexus Criteria	Effective Year
Colombia	SEP WHT VAT	SEP: 3% of the total gross income	Digital services, e-commerce provided by non-resident firms	Systematic interaction with local market- 300,000 users or customers; or transaction with prices or payment in local currency Gross transaction value per year of 31.300UVT (USD 490,000)	2022
India	Equalisation Levy (EL) & SEP WHT GST	EL of 6% on advertisement (2016) EL of 2% e-commerce (2020) SEP rules (2022)	Online ads, e-commerce, provided by non-resident firms SEP based on revenue/users	online ads and ecommerce payment exceeding INR 0.1 million (USD 1,500) does not cover digital service providers with annual revenue below INR 20 million (USD 235,000) SEP: systematic user interaction -300,000 users Transaction value: annual revenue of at least INR 20 million (USD 235,000)	2016 (EL online ads) 2020 (EL e-commerce) 2022 (SEP)
Kenya	DST SEP VAT	DST: 1.5% of gross revenue SEP: 3% OF gross turnover (CIT of 30% on the taxable profit – profit deemed as 10% of gross turnover)	Digital services, software, data; e-commerce provided by non-resident firms	No revenue threshold for DST Local IP, billing address, payment intermediaries SEP revenue threshold - KES 5 million (USD 40,000) annual turnover	2021 (DST) Dec 2024 – (SEP)
Nepal	DST VAT	DST: 2% on transaction amount	Digital transactions and online services by non-residents	Annual transaction NPR 3 million (USD 22,351)	2022
Nigeria	SEP WHT VAT	SEP: No fixed rate; CIT applies on profit. No fixed deemed profit formula.	Digital transactions and services, e-commerce by non residents	Revenue threshold of NGN 25 million (USD 15,000), or significant digital interaction - local domain or payment option Management or professional services.	2019 (SEP rule proposed)
Tanzania	DST WHT VAT	DST: 2% of turnover	Online services and e-commerce platforms for B2C transaction.	Turnover-based; applies to non-residents for payments by local users for digital services	2022

			Excludes B2B transactions (which are covered by WHT)		

The review of the five countries, Colombia, India, Kenya, Nigeria, and Tanzania, shows that all have adopted national measures to tax the digital economy, though with varying tax rates, scope, and implementation strategies, as indicated in the table. Colombia and Nigeria have an SEP tax. India had both Equalization Levy (EL) and SEP tax, but has since withdrawn EL on e-commerce in August 2024 and EL on online advertisement in April 2025. Kenya and Tanzania have DST. However, Kenya transitioned from DST to SEP in December 2024. All countries use self assessment for compliance. Colombia, India, Nigeria and Tanzania have withholding tax mechanism to enforce compliance on payments made to non residents for B2B transactions.

Tax rates for DSTs across the countries range from 1.5% to 6% of gross revenue, with scope covering a wide array of digital transactions, including streaming services, digital marketplaces, data, and user interactions. Nigeria SEP is broader, as it includes payments to non-residents for provision of management or professional services. While the SEP tax for Colombia and Kenya applies a fixed deemed profit percentage to determine profitability, Nigeria's SEP FIRS uses various benchmarks such as group profitability ratios, EBITDA-based proxies, and turnover-based assessments to determine profitability. Similarly India's SEP applies domestic provisions which empower the Assessing Officer to adopt the most reasonable method based on the specific facts of the case.

All countries apply different minimum revenue or user thresholds, except for Kenya and Tanzania, whose DSTs have no thresholds, potentially increasing the tax burden on smaller entities. Tanzania DST sourcing rules are limited to payments by locals to non-resident companies for digital services for B2C transactions only while B2B transactions are taxed through WHT.

All the countries implement complementary tax measures. Colombia, India, Kenya, Nigeria and Tanzania apply WHT on payments for digital transactions to non resident service providers. All the six countries impose VAT or GST on cross-border digital services for a comprehensive tax system.

The revenue from DSTs have grown over time, generating significant revenues in India, Kenya, Nepal and Tanzania. The revenue yield for SEP in Nigeria and Nepal has also grown, but it is yet to generate significant revenue. Penalties, interest and fines vary widely across the countries from a fine of 0.1% in Nepal to a 100% of the unpaid EL in India, indicating considerable disparity in enforcement approaches.

A common feature across all jurisdictions is the dynamic and evolving nature of legislation. Countries continue to refine their laws in response to the rapid pace of digital transformation and the need to broaden the tax base: India expanded the scope of transactions covered by EL in 2020 and has eventually withdrawn the EL in anticipation of multilateral reforms. Nepal expanded the tax threshold in 2024. Kenya has shifted from a gross-based DST to a net-based SEP model.

DST returns are filed monthly in Kenya and Tanzania. In the case of Nepal, the return is done annually. SEP returns are filed annually in Nigeria. In Colombia, registered non-residents under the SEP rules are required to file an annual return but make monthly provisional income tax payments. For India, the EL returns are filed annually, but advance tax payments are required quarterly. The provisional monthly payments in Colombia and the quarterly advance payments in India enhance compliance.

Some **challenges** persist in the implementation. One of the challenges is the interaction of SEPs with tax treaties limiting its effectiveness as is the case for Colombia and India's SEPs.

Another challenge is politically, countries applying unilateral or national measures may face disadvantages if peer jurisdictions do not impose similar measures. Colombia, for instance, faces this issue since other countries in the region have not adopted similar measures, and the lack of double tax relief only worsens the situation.

Countries also face enforcement limitations. Tax authorities struggle to enforce compliance on non-resident digital firms with no local physical presence. Many lack access to reliable information on the operations of global digital companies with local digital footprints. Another challenge is lack of clear profit attribution rules for an SEP as is the case for Nigeria and India which may increase uncertainties.

Best country practices

Several best practices have emerged from the country experiences in designing and implementing digital tax measures. Developing countries considering introducing digital taxes can draw upon the following best practices when designing their tax:

- **Clear thresholds and revenue-based nexus**: Most of the countries have clear scoping rules and thresholds providing structured criteria for establishing digital presence. These thresholds help target large non-resident digital service providers, while reducing the compliance burden on smaller firms.
- **Separation from income tax systems**: India's Equalisation Levy avoids treaty complications by being legislated outside its income tax law. Countries with an extensive tax treaty network can go for this option. However this may limit the granting of double tax relief.
- **Integration with existing WHT, VAT/GST systems**: Colombia, India and Nigeria have WHT on digital transactions. Nepal, India and Kenya apply VAT on digital transactions. This broadens the tax base and enhances compliance. In Colombia, the higher withholding tax compared to the tax applicable under the SEP regime on digital services encourages non-residents to register voluntarily and make self-assessments. Importantly, having financial institutions and intermediaries as withholding tax agents, like the case for Colombia, can enhance compliance and close loopholes.
- **Simplified tax computation**: Colombia, India, Kenya and Tanzania have pursued gross-based taxation with flat rates, which reduce complexity for revenue authorities with limited capacity and limited information availability. However, taxing on a gross basis may not account for industry-specific profit margins and could increase the risk of retaliatory measures by developed countries.
- **Provisional monthly payments or advanced payments** like in the case of Colombia and India. Where a regime requires annual tax return filing, advance or provisional payments enhance compliance, ease the tax burden on taxpayers, and ensure timely revenue collection by the government.
- **Dedicated and well-resourced unit within the tax administration** to oversee the implementation and enforcement of digital taxes. Countries such as Kenya and Tanzania have adopted this approach by creating specialized teams to administer DSTs. These units should be equipped with adequate technical capacity, staffing, and digital infrastructure, and receive ongoing training and support to effectively manage taxpayer registration, compliance monitoring, and enforcement.

- **Mandatory registration for non-resident digital providers**, as introduced in Kenya, Nigeria and Nepal, improving the visibility of non-resident taxpayers and supporting compliance monitoring.
- Countries have introduced **incentives to encourage companies to comply**. Colombia charges a lower rate of 3% SEP on registered non-resident companies while a higher general withholding tax of 10% applies to non-resident companies who have not registered. Recognizing compliant taxpayers publicly can incentivize compliance. Kenya incentivizes compliance where efforts by compliant non-resident taxpayers are recognized during taxpayers' month. Simplifying the registration and filing processes where everything is done online can increase compliance, for instance, online systems like *iTax* in Kenya and *TaxPro Max* in Nigeria allow automatic registration and filing.
- **Collaboration with other government regulatory departments**: India's collaboration with other regulatory bodies has improved legislative alignment and strengthened compliance. Policies requiring local data storage, especially for fintech, e-commerce, telecommunications, and health-tech firms, have led many digital businesses to maintain servers in India, which improves traceability and facilitates tax enforcement.
- Colombia and Nigeria have an **anti-avoidance provision** to ensure the minimum revenue threshold is not manipulated by looking at the aggregate transaction value of all transactions with related parties and affiliates.
- **Peer learning** can build capacity and help with benchmarking. Kenya, Nigeria and Tanzania have engaged in peer learning exercises on digital economy taxation.

Toward harmonization and streamlining

The case studies illustrate the diversity of national measures in design, enforcement, and implementation. While national measures have generated significant revenues, the fragmented digital tax landscape has also led to increased compliance costs, legal uncertainty, and heightened risks of double taxation and trade tensions. The continuous changes in legislation increase uncertainties further. To address this, countries should pursue regional or international cooperation to set global standards. Countries can begin by aligning core elements of their digital tax regimes, including:

- Standardized definitions of the scope of digital services and SEPs
- Consistent sourcing rules for DSTs and SEPs
- Common thresholds for revenue or user base to establish nexus
- Defining an acceptable range of tax rates for DSTs
- Consistent profit attribution rules for SEP
- Harmonized reporting requirements and simplified registration systems for non-resident digital service providers
- Leveraging regional platforms for mutual tax administration assistance, including exchange of information, tax collection, and enforcement strategies
- Enhancing regional coordination to avoid competitive disadvantages

Harmonization is not about uniformity, but about creating coherence and compatibility while being flexible enough to balance national sovereignty with international consistency to ensure fair, transparent, and effective taxation of the digital economy. The fact that countries have shown commitment to finding a globally negotiated solution to tax the digital economy under the UNFCITC is promising.

Considerations for the protocol to the UNFCITC

The diverse national experiences in Colombia, India, Nepal, Kenya, Nigeria, and Tanzania offer valuable lessons for designing a globally consistent, digital tax protocol under the UNFCITC. To build on the country experiences and promote coherence while respecting national differences, the following considerations should inform the protocol's design:

1. **Affirm Source-Based Taxation Rights that align with digital business models**

   The protocol should clearly affirm the right of market jurisdictions to tax income arising from digital services consumed within their borders, where users generate substantial economic value. This can be achieved through:

   - Expanding the definition of PE to include non-physical digital presence such as user interaction or revenue thresholds or digital presence factors such as local domain name, digital platform or local payment option.
   - Source taxation rights through WHT on revenues sourced from market jurisdictions.
   - Encouraging bilateral treaty updates to align with the new source taxation principles. This can be done through the protocol.

2. **Standardize Key Design Elements**

   To reduce fragmentation and legal uncertainty, the protocol should promote standardized rules for:

   - Scope and sourcing rules for DSTs and SEPs.
   - Consistent revenue or user thresholds, and an acceptable range of tax rates.
   - Consistent profit attribution rules for SEP that reflect economic activity, including alternative profit allocation methods for the digital business models like fractional apportionment, with special attention to the practical enforcement needs of developing countries. This can build on the net method of Article 12B which already uses fractional apportionment.

3. **Flexibility and Simplified Options**

   The protocol should support simplified compliance models recognizing the capacity constraints faced by many developing jurisdictions, and provide countries with an acceptable set of tax options to choose from depending on country priorities and capacity. These may include:

   - WHT on gross payments.
   - Deemed profit methods for SEP-based taxation, offering predictable and administrable outcomes.
   - Flexibility in choice of taxation options and in implementation timelines, allowing for phased adoption based on domestic readiness.
   - The tax proposals should also be dynamic to keep up with the rapidly evolving digital business models.

4. **Eliminating Double Taxation**

   The protocol must clearly define that when the acceptable set of tax options such as DSTs, SEP taxes, and digital WHTs are implemented by a party to the protocol, they are eligible for foreign tax credits. This clarity is essential to avoiding double taxation. In sum, countries who sign on to the UN protocol would commit to applying only the set of acceptable tax options and to giving tax relief for taxes paid by their residents in other countries to those

tax options. The protocol can be designed in a manner similar to Article 46 of Amount A Multilateral Convention[22], such that it overrides existing bilateral tax treaties in force between parties to the protocol.

5. Promote Mutual Administrative Assistance in Tax Matters

Effective enforcement of digital tax measures depends on the ability of tax administrations to identify, register, and monitor non-resident digital service providers and enforce tax. In alignment with this, the protocol should promote:

- Exchange of information to access payment and user activity information, and assistance in tax enforcement and recovery.
- Encourage global cooperation on data access and registration of non-resident suppliers.
- Harmonize reporting requirements for companies.

6. Establish a Dispute Resolution Mechanism

Develop a multilateral dispute prevention and resolution mechanism to resolve related conflicts.

Summary

This paper shows that the taxation of non-resident digital service providers creates enormous challenges for many tax administrations. Recognizing the challenges, the OECD in its Action 1 report on addressing the tax challenges of the digital economy, recommended the application of EL, SEP taxes or WHT. Those recommendations were not pursued by the OECD, rather Amount A of Pillar One was developed.

India, Kenya, Colombia, Nepal, Tanzania and Nigeria have enacted national measures considering the need to act promptly in protecting their tax bases and the fact that only few companies are expected to be in-scope of Amount A which may not translate into reasonable revenues for many countries, as well as the concern that Amount A may not be ratified given that by design, the United States has veto power over Amount A.

While the national measures introduced by the countries analyzed did not follow the same paths, all the legislations established nexus between the non-residents and their jurisdictions using revenues and in some cases users' thresholds. The implementation of the national measures introduced by the countries present tax policy challenges because of the interaction of the national measures with tax treaties and indirect taxes. Given the restrictive definition of permanent establishment in double tax agreements, non-residents shop around in order to escape taxation in source jurisdictions.

Considering that the implementation of national measures face significant challenges including compliance and enforcement, interaction with tax treaties and that bilaterally negotiating Article 12B of the UN MTC into existing treaties is complex and time-taking, a multilateral solution would be required to ensure the non-resident digital companies pay their fair share of taxes in markets where they have interaction with users, customers or views. The

[22] OECD/G20, The Multilateral Convention to Implement Amount A of Pillar One: Two-Pillar Solution to Address the Tax Challenges Arising from the Digitalisation of the Economy (2023). Available from https://www.oecd.org/en/topics/sub-issues/reallocation-of-taxing-rights-to-market-jurisdictions/multilateral-convention-to-implement-amount-a-of-pillar-one.html.

UN Protocol on taxing income from cross border digital services under the UNFCITC could provide for fairer and more equitable rules, and the paper has outlined its key design elements.

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