



## **ITU WORKSHOP ON TAXATION OF TELECOMMUNICATION SERVICES AND RELATED PRODUCTS**

ITU Headquarters Geneva, Switzerland  
1-2 September 2011

### **Summary report**

The main web page for the workshop is at:

<http://www.itu.int/ITU-T/worksem/taxation/201109/index.html>

The detailed program and the presentations made at the workshop are available at:

[http://www.itu.int/ITU-D/finance/work-cost-tariffs/events/tariff-seminars/Geneva\\_Taxation/Agenda.htm](http://www.itu.int/ITU-D/finance/work-cost-tariffs/events/tariff-seminars/Geneva_Taxation/Agenda.htm)

The workshop was audiocast and the audiocast is available at:

<http://www.itu.int/ibs/ITU-T/201109tax/index.html>

The main workshop paper, written by Prof. Martin Cave and Dr. Windfred Mfuh, is available at:

[http://www.itu.int/ITU-D/finance/work-cost-tariffs/events/tariff-seminars/Geneva\\_Taxation/pdf/Cave%20tax%20paper-e.pdf](http://www.itu.int/ITU-D/finance/work-cost-tariffs/events/tariff-seminars/Geneva_Taxation/pdf/Cave%20tax%20paper-e.pdf)

The paper on international double taxation, written by Paul DePasquale and Alyssa Varley of Baker & McKenzie, is available at:

[http://www.itu.int/ITU-D/finance/work-cost-tariffs/events/tariff-seminars/Geneva\\_Taxation/pdf/DePasquale\\_Varley-Contribution-e.pdf](http://www.itu.int/ITU-D/finance/work-cost-tariffs/events/tariff-seminars/Geneva_Taxation/pdf/DePasquale_Varley-Contribution-e.pdf)

The workshop was attended by 85 participants from 41 countries.

### **Opening Ceremony**

Mr Malcolm Johnson, Director of TSB, welcomed the participants on behalf of himself and Mr Brahima Sanou, Director of the BDT, noting that this workshop was organized just prior to the 2011 meetings of the ITU-D Study Groups next week to enable greater participation, and expressing satisfaction for the level of participation which confirms the high importance attached to this topic, particularly in developing countries, and especially Africa. He also welcome those following the webcast and informed participants that this will be archived for future reference.

The Director introduced two distinguished experts who will be leading this workshop: Prof. Martin Cave, from the London School of Economics; and Dr. Windfred Mfuh from the University of Warwick.

He noted that ITU-D has been working on issues related to pricing and tariffs for NGN, next generation access (NGA) and broadband, etc for some time. This year it was decided to extend this work with a focus on taxation. This will contribute to the preparation of a balanced overview of the actual situation in the different regions.

Within this framework, the Director thanked Prof. Cave for the very informative and balanced paper he developed and will present during this workshop.

The Director noted that this year BDT decided to include a section in the BDT tariff policies survey to start collecting information on taxation of telecommunication services. The ITU very much hope to continue receiving responses which will be used to populate the ICTEye database which can be found online on the ITU website and is an excellent resource for membership and others.

Mr Johnson expressed his, and the BDT Director's, satisfaction with the excellent coordination and exchange of information between the ITU-D Study groups, specially Question 12-3/1, and ITU-T Study Group 3 and its related Regional Groups. This workshop was therefore very much a joint effort between the two Bureaux, as are all our workshops which can be found listed on the ITU home page..

Following Resolution 146 of the ITU 2010 Plenipotentiary Conference, the ITU is preparing for the World Conference on International Telecommunications 2012 (WCIT). The results of WCIT may well impact taxation methodologies. Delegates are therefore encouraged to take an active part in the preparations for the WCIT, in particular in the Council Working group, and in the regional meetings being held by the Regional Organizations and ITU.

The objective of this workshop is to discuss factors that should be taken into account in order to strike an appropriate balance between the goals of raising revenues and facilitating economic expansion throughout the telecommunications sector. Taxes are unavoidable, the trick is to find the least worst way to collect them.

The Director concluded by encouraging debate and discussion and stating that he expected that the summary of the workshop would inform further debate.

### **Session 1: Telecommunication service taxation: Understanding the process**

Prof. Cave introduced the key elements of his paper, which is about the desirability of taxing telecommunications services, especially in developing countries. It is a subject hotly debated and contested by governments, which often see telecommunications as a one of only a few sectors which are both thriving and served by large, often international, firms from which taxes can fairly readily be collected; and by operators, who argue that, in terms of economic growth, the sector is 'the goose which lays the golden egg', and should not be stunted by taxation. (The fact that the operators' primary motive may be to maximise profits does not invalidate this public policy argument.)

The aim of the paper is to provoke a discussion by members of the ITU and other organisations over the pros and cons of taxing telecommunications. Taxation of telecommunications services offers quite a lot of latitude for governmental ingenuity, as the following list of sector-specific taxes indicates.

- 1) Many countries have a specific ad valorem (percentage) tax on telecommunications bills. There are lots of options here: mobile, fixed, or both sorts of bill can be targeted;

particular components of the bill could be targeted, such as a monthly charge, or calls (perhaps of a particular type). These options will have different effects .

- 2) A fixed charge tax per time period can be imposed on a bill. This might be so much per month on post-pay mobile contracts.
- 3) A specific tax on hand-sets, sometime to accumulate revenue to remunerate content producers.
- 4) Sector-specific tariffs on hand sets.
- 5) Sector-specific tariffs on other telecommunications equipment.
- 6) Tax or excessive charges for spectrum. If a spectrum tax were imposed, it would fit clearly into the category. But suppose a government or spectrum regulator from one day to the next simply raised spectrum usage charges by, say, 20%. Or suppose (more probably) it withheld available spectrum in an auction in order to raise the price. Both effects would be the equivalent of a tax. This may be a particularly important form of the government appropriating revenue from the sector, but it largely escapes notice as a fiscal measure.

There is quite a wide variation in the level of telecommunication taxation across the world. A study by Deloitte has calculated taxes as a proportion of the total cost of ownership (TCO) of a mobile telephone, defined as the monetary sum required to be connected to telecom services, taking into consideration the price of the handset, services (calls and SMS) and taxes. The data show that Eastern Europe records the highest taxation proportion – 17.87%, including all direct taxes applicable to handsets and services, i.e. VAT, import duties, various sales taxes and extra telecom taxes, followed by Africa (13.87%); while the Middle East records the lowest level of taxes (5.97%). There are also differences in the breakdown of non-tax costs between handsets and services.

Policy on telecommunications taxes is embedded within a much broader range of questions concerning the desired structure of taxes (on income, consumption, wealth, etc), the appropriate level of public expenditure, either on goods and services or on transfers within the population, the best means of financing public expenditure (by taxes or borrowing), which is itself linked with overall macroeconomic and growth policy.

Choosing what to tax involves a range of considerations of which the following five are of particular importance:

- A. the effect on income distribution;
- B. the cost of collection;
- C. the incidence of the tax;
- D. the efficiency cost of the tax (sometimes called the deadweight loss or excess burden);
- E. input taxes and tariffs;
- F. Overall approaches to commodity taxation.

## **Session 2: Presentations from countries and associations**

### *National Communication Authority NCA Ghana*

The ownership of the incumbent telecom companies by Governments ensured that all revenues from sales of terminal equipment, charges for network usage as well as revenues from international traffic termination was accrued to the Government.

In spite of the benefits of the privatization and liberalization of the telecom market in developing countries, there has been significant loss to Governments in revenues that are due it as a major stakeholder in the profits of telecommunications business. It is of equal importance that government intervenes to maintain its stake in revenues just as it provides incentives for growth for the market.

With the current complexities of international telecom trade, it is recommended that the WTO reference telecom paper on Basic Telecommunications be suppressed as it is currently being used by Developed countries to exploit liberalized telecom economies in developing countries. The ITU should take charge of the discussions and resolutions on this matter, going forward.

*Ministry of Transports, Posts and Digital Economy, Burkina Faso*

The licensed telecom services providers in Burkina Faso are subject, by the sector specific law, to contributions for the sector regulation, universal access development and training. The VAT taxation applies to both interconnection services and all retail prices of telecom services. The import of telecom handsets has been exempted from VAT taxation but Regional Economic Community and intellectual property specific taxes are still applied. The taxation of incoming international traffic is a subject under consideration.

*Global Voice Group GVG*

This paper outlines the challenges facing governments in emerging economies with respect to collection and recovery of taxes and contribution in the increasingly complex NGN environment. It explains how this rapid evolution will particularly affect the emerging countries and stresses, among other needs, the necessity to implement IP Traffic Measurement mechanisms both for their regulatory authorities and the mobile network operators. In this complex telecom environment, the paper also explains why the ITU's D.50 Recommendation is more relevant than ever and what needs to be achieved in terms of policies and technologies to help apply this Recommendation.

*France Telecom Orange Group*

This presentation makes the point that telecommunications services are a very important source of economic development. Africa and the Middle East are two large markets that are growing rapidly: this potential must not be restrained. The evolution of international tariffs, based on costs, both for voice and for Internet, favors real development of countries, enables important benefits for end-users, and generates significant revenues for governments. Thus it is important to favor the growth of the market.

Transparency of revenues and traffic flows is already ensured: operators have no incentive to cheat and control and audit mechanisms are in place.

Decisions on taxation should as far as possible neutral with respect to the telecommunications sector, or even favor the development of the sector instead of restraining it. Indeed an excessive fiscal pressure necessarily engenders development of mechanisms to bypass the tax system: increase in fraud (SIM boxes, bypass, etc.) and thus results in a reduction in the medium term of the fiscal contributions of operators and of their investments.

*Ministry of Post and Telecommunications, Cameroon*

This presentation gives an overview of the various taxes and fees to which the players in the telecommunications sector are subject in Cameroon, in particular operators which hold public

service concessions. The contributions of those operators to the GNP are presented, as are their contributions to tax revenues, and the question of the degree of taxation of telecommunications services is posed. The presentation discusses the impact of the change in certain tax rates on penetration rates and on the contribution of the telecommunications sector to GNP.

### **Session 3: The impact of taxation on ICT growth**

Prof. Cave continued with the presentation of his paper, stating that one of the most interesting and important aspects of the debate concerns a feedback mechanism which is widely considered to be particularly important in application to telecommunications. The feedback works as follows. A government levies a tax on telecommunications. As a result, the roll-out of services is delayed. This has a direct effect on national income, which includes telecommunications output. However, there is also a spill-over effect. This arises because telecommunications services are used in many other sectors, and can increase productivity there. Accordingly, the tax has a broader effect on the growth of national income, and hence on future tax revenues.

The following key parameters determine how powerful this argument is:

1. the level of the tax;
2. the incidence of the tax;
3. the impact of the resulting price increase on the purchase of services;
4. the impact of the changed level of purchases on GDP growth;
5. the direct tax revenue (taking account of leakages, evasion etc);
6. the marginal tax rate on the income which the imposition of the tax has eliminated;
7. the discount rate used to make tax revenue accruing in the future commensurable with tax revenue available now.

A factor to consider is the capacity of communications services to transform other sectors as well. This has been recognized since the famous study of the impact of mobile telephony on the South Indian fishing sector, and work by Waverman and others on mobile telephony. That is, telecommunications services contribute to the economy not just directly, but also by facilitating the development of other sectors.

Thus what may distinguish the communications sector is the externality which it generates. The presence of an externality signifies a market failure, which a well-structured intervention can correct. Normally, a positive externality might imply a subsidy. Here it might imply a level of taxes reduced from the average, or alternatively, an argument opposing the imposition of a specific tax on telecommunications services.

Preliminary analysis of country case studies indicates the following:

- a) Many tax administrators are beginning to understand that telecommunication services are somewhat different from other services and products within the economy due to their higher capacity to stimulate economic growth and social development. And for that reason some sector specific taxes that impact negatively on penetration and usage are either being reduced or completely eliminated.
- b) To some degree, this is in contradistinction with what is happening in other countries where the telecommunication sector with its generally favourable cash flow looks a relatively easy source of revenues to drive down deficits.

- c) Understanding of the consequences of very high telecommunications taxes may be growing. High tax rates or tax increases for the sake of revenue generation may be counterproductive.
- d) The incidence of tax increases and decreases can vary.
- e) For the telecommunications industry to yield the maximum benefits as a source of growth, tax authorities, regulatory authorities and operators need to work together.
- f) It is complex to explain the differences in tax rates across the sample countries as it is a combination of economic, political and social variables.

### **Panel discussion**

It was stated that telecommunications taxes were recently imposed in Benin by presidential decree, given lack of action by parliament on the approval of the budget. But it would be preferable if taxes were only imposed as a result of laws approved by parliament. Further, it is important to consider the impact on consumers of any taxes.

In Burkina-Faso, the tax on incoming international traffic was voted by parliament, and all factors were taken into account, including the impact on consumers. The tax has been suspended pending further study of its effects. Regarding control mechanisms, one cannot compare the situation in developed countries with the situation in Africa. Methods other than traditional financial audits are more likely to be effective in Africa. Revenues from taxes on telecommunications services can be used to help create an inclusive society from the point of view of Information and Communications Technologies (ICTs).

In Cameroon, the tax was also voted by parliament. The telecommunications regulator is responsible for verifying that the traffic volumes announced by operators correspond to reality, but in practice the regulator has not had the resources to perform this verification. The taxes are borne by all parties, operators as well as end-users.

In Ghana, the government feels that improved tools are required to verify the traffic volumes announced by operators. In particular, real-time computerized monitoring is preferable to traditional audits. Increases in taxes have, in many cases, resulted in reductions in prices charged by operators. Taxes on incoming international traffic do not affect national end-users. The taxes have largely been absorbed by the operators and have not increased end-user prices. The revenues from the taxes have been used to favor the development of additional telecommunications infrastructure.

Global Voice Group stated that it is important to tax intelligently, in particular not to tax handsets. Taxation of traffic flows, in particular international flows, is preferable.

France Telecom Orange stated that ex-post traffic controls are more effective and efficient than real-time monitoring. All telecommunications operators are large companies that are subject to regular audits. As stated during the workshop, the telecommunications sector contributes to GDP growth, in particular in developing countries, and generates positive externalities. Taxation must take this into account and not be excessive.

Comments made by participants during the discussion include the following:

- i. It is generally appropriate to distinguish taxation of domestic services from taxation of international services, in particular incoming international traffic. Self-reporting by telecommunications operators and traditional audits are not sufficiently reliable methods to monitor incoming international traffic.

- ii. It is important to mitigate the risk of over-taxing the ICT sector, in particular by using tax revenues on ICTs to develop the national ICT infrastructure.
- iii. Real-time monitoring solutions can be expensive and do not always provide reliable data. Use of such solutions requires a sustained long-term commitment and the capability to evaluate and implement such solutions.
- iv. High tax rates can lead to increased bypass and/or fraud and are sometimes passed on to consumers.

#### **Session 4: International double taxation of telecommunications services**

Cross-border business and investment activity invariably involves the tax rules of more than one jurisdiction. When multiple jurisdictions impose separate and sometimes conflicting tax rules, cross-border activities can be subject to double taxation (taxation by two or more countries of the same income, asset or transaction).

The principal mechanisms for avoiding double taxation are (i) to exempt the income from taxation in one or more jurisdictions (the "exemption method") or (ii) to allow double taxation but permit the taxpayer to claim a credit or deduction for taxes paid in one jurisdiction against his or her tax liability in another jurisdiction (the "credit method").

The paper provides a brief overview of the mechanisms governments use for avoiding double taxation. After a brief discussion of the current treatment of the joint provision of international wireless telecommunications services under the International Telecommunications Regulations ("ITRs"), the paper discusses the principal mechanisms for avoiding double taxation and principal variations for each method.

There are two basic types of double taxation. The first type of double taxation is often called "economic double taxation." Economic double taxation occurs where two different persons are subject to tax on the same income or capital. Economic double taxation is permitted to occur in many instances in domestic and international tax systems. For example, economic double taxation is allowed to take place when a corporation is taxed on corporate income and the same profits are taxed a second time to the shareholder of the corporation when the corporation distributes the profits as a dividend.

The second type of double taxation is "juridical double taxation." Juridical double taxation occurs where one person is subject to tax on the same income or capital by more than one tax authority. This paper focuses on mechanisms for avoiding juridical double taxation rather than economic double taxation.

In order to mitigate the potential consequences of double taxation and to insure that tax rules are applied consistently and fairly, a mechanism for avoiding double taxation should (i) protect against the risk of double taxation in instances where the same income is taxable in two countries; (ii) define which taxes are covered by the agreement; (iii) provide a procedural framework for enforcement and dispute resolution; (iv) protect each government's taxing rights; and (v) protect against attempts to avoid or evade tax liability.

#### **Session 5: Presentations from countries and associations**

##### *Senegal Regulatory Authority ARTP*

This contribution presents the general situation in Senegal with respect to telecommunications and provides information on recent developments in taxation. In January 2010, the tax on access

or use of public telecommunications networks was raised from 2% to 5% of the pre-VAT value of the amount billed to end-users (this tax is collected by the operators). At the same time, the VAT was suppressed for telecommunications services as were customs duties for fixed and mobile handsets.

With respect to incoming international traffic, a floor price has been set, and a fixed portion of the revenue is paid to the government. This is similar to what has been done in some other countries and is meant to protect the national networks. In order to ensure correct payment, a control system has been put into place, independently of the declarations provided by the operators.

Operators vigorously protested against this system, so it was suspended for three months. However, the system has been reactivated in August 2011.

### *Sonatel Orange Senegal*

This contribution states that, in Senegal, telecommunications operators are subject to the normal corporate profit tax (25%), to value-added tax (18%), to an excise tax on telephone usage (5%), universal service contribution (3%). And in addition to other general taxes such as import duties, property taxes, etc.

In May 2010, the government put into place a system to control incoming international traffic and to set the floor price at 0.21 Euro-cents per minute, corresponding to an increase of about 117%, about half of which is paid to the government. The result was a decrease of 14% in incoming international traffic and an increase in alternative solutions such as Skype and in fraud.

The surtax resulted in a loss of eight mostly African partners due to reciprocity agreements.

The surtax system was suspended in November 2010 but the market remains perturbed and traffic continues to decrease, because the price decreases have not yet been passed on to end-users.

The surtax is not consistent with the evolution of tariffs since 1998, which were declining regularly due to the alignment of tariffs with costs as called for by Recommendation ITU-T D.140.

The contribution concludes that this surtax was one tax too many and that it created significant collateral damage: a decrease in incoming traffic, an increase in operators' costs, an increase in consumer prices, an increase in fraud and alternative solutions such as Voice over IP.

### *ARPTC Democratic Republic of Congo*

This contribution presents some ICT indicators in the Democratic Republic of Congo and its regulatory framework which is meant to favor the development of the telecommunications sector. The indirect taxes and fees in force are presented, as are their impacts, in particular on the growth of mobile networks.

The contributions conclude that ill-conceived and excessive taxation (direct or indirect) can affect both the capacity of operators to invest in growth and the capacity of end-users to increase the operators' revenues.

## **Session 6: The economic impact of taxation – public/private roles**

Prof. Cave continued with the presentation of his paper, stating that affected firms and consumers, unlike governments, tend to have an unambiguous response to specific taxes on the services they produce and consume, although analysis of tax incidence suggests that according to circumstances they may suffer in different degrees.

Achieving equity for consumers within a telecommunications tax is a tall order. Richer users for both consumption and business purposes are likely to purchase more expensive devices and to make heavier use of their network for both voice and data. Many poor rural consumers mostly receive calls on a very inexpensive handset. There may be no general pattern of redistribution.

## **Session 7: GSMA Global Mobile Tax Review – preliminary findings**

The GSM Association commissioned Deloitte to undertake a global study on taxation of mobile services in 111 countries worldwide. The study measures consumer taxes on mobile services as a proportion of the Total Cost of Mobile Ownership (TCMS) and the Total Cost of Mobile Usage (TCMU).

Previous GSMA studies indicated that mobile telecommunication taxes were disproportionately high in many developing countries and that even small cuts in taxes may attract significantly more mobile users. However, in response to the 2008 global economic crisis, governments seeking to cover budget deficits often turned to growing telecommunication service usage as a source of increased tax revenues. The average taxation of mobile services has increased since 2007, up to 18.04% from 17.30%. Tax as percent of TMCO ranges from 5 to 48%.

The presentation provides detailed data for each of the surveyed countries and argues that reductions in tax rates would be beneficial.

The presentation also discusses the surtax on incoming international calls applied in some African countries and argues that, by fixing prices at a rate higher than competitively determined prices, the surtax represents a move backwards for liberalization of telecommunications in Africa. A number of distortions arise when prices are not set competitively, negatively affecting consumers and businesses, in particular due to decrease in volume of calls and increase in illegal traffic termination.

## **Panel discussion**

In response to a question, it was stated that whether or not to apply different regimes to different types telecommunications services (e.g. fixed versus mobile) would depend on specific national circumstances and policy goals but, in general, simple and uniform tax regimes are preferable to regimes that include many special cases or exceptions.

It was stated that public private partnerships are likely to be the best method to ensure adequate investments in broadband infrastructure. This could be a better method than imposing excise taxes on telecommunications services and could include financial contributions from operators.

Regarding the study from the GSMA, it was suggested that it would be useful to study the manner in which tax revenues were used. Experience in many countries indicates that taxes levied on the telecommunications sector are not actually used to fund universal service, they tend to be viewed as general revenues for the government.

It was stated that introduction of customs duties on handsets in some countries has led to an increase in smuggling; the same might happen in the case of taxes on incoming international traffic. In response, it was stated that it is important to measure traffic flows, not just for traditional voice, but also for IP-based networks. In some countries, such monitoring and measurement has been used successfully for voice services.

### **Concluding remarks**

Mr Mario Maniewicz of BDT expressed his thanks to Professor Martin Cave and Dr. Windfred Mfuh for their valuable and clear explanations as well as to all the moderators, panelists and speakers for sharing their experiences which reflect the advantages and disadvantages of the taxation of telecommunications services. The ITU has published the results of the BDT Study on Taxing telecommunications/ICT services: an overview, prepared by Prof. Cave is available on the website for your consultation.

Mr Maniewicz remarked that the aim of this workshop was to provoke a discussion by Members of the ITU and other organizations over the best ways to implement taxation mechanisms of telecommunications/ICT services and devices.

As the telecommunication/ICT environment is changing every day, the variety of taxing options is growing as well, and it is sure that its impact on the growing of the sector could affect broadband penetration and economic growth.

Many tax administrators are beginning to understand that telecommunication/ICT services are somewhat different from other services and products within the economy due to their higher capacity to stimulate economic growth and social development. And for that reason some sector specific taxes that impact negatively on penetration and usage are either being reduced or completely eliminated.

The situation of double taxation needs to be considered as a priority by Administrations, in order to mitigate its potential consequences and ensure that tax rules are applied consistently and fairly. It is important to note that proposals have been made to discuss this issue at the WCIT, which will revise the ITRs in December 2012.

Mr Maniewicz recalled the maxim of Mr. Jean-Baptiste Colbert cited by Prof. Cave during his first presentation: the art of taxation consists in so plucking the goose as to obtain the largest possible amount of feathers with the smallest possible amount of hissing.

Applying this maxim to the specific case of taxation of telecommunication services, one can envisage a possible synthesis, in which there are at least three effects to weigh up – a presumption based on general reasoning about tax policy in favour of no telecommunications exceptionalism; a concern about differential costs of tax collection; and the distinct possibility that imposing a tax will generate more tax revenue at the cost of growth. Balancing them is likely to be a case-specific process. It will not always be mistaken to impose a special tax on telecommunications services: circumstances can be envisaged when it may be the least bad policy available.

But governments should think carefully before imposing new telecommunications (or other) taxes, and only do so when there is no alternative way of increasing tax revenue which would be less damaging to the economy in terms of market distortions and negative impacts on economic growth.

For the telecommunications industry to yield the maximum benefits as a source of growth, tax authorities, regulatory authorities and operators need to work together. For example, having a tax consultation with major stake holders before essential tax decisions are made. It could be quite helpful to assess the potential distortionary effects of each tax on the quality and quantity of services as well as potential welfare losses.

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