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Services Trade Restrictiveness Index (STRI): Scoring and Weighting Methodology

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JEL Classification: C10, C80, F13, F14, F53

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Abstract

SERVICES TRADE RESTRICTIVENESS INDEX (STRI): SCORING AND WEIGHTING METHODOLOGY

by

Massimo Geloso Grosso, Frederic Gonzales, Sébastien Miroudot, Hildegunn Kyvik Nordås,
Dorothee Rouzet and Asako Ueno, OECD Trade and Agriculture

This paper presents the scoring and weighting methodology for calculation of the services trade restrictiveness indices (STRIs) for 18 sectors. The STRIs are composite indices taking values between zero and one, zero representing an open market and one a market completely closed to foreign services providers. The scoring system is based on binary scoring. To reconcile the complexity of services trade restrictions with binary scoring, non-binary measures are broken down to multiple thresholds; complementary measures are grouped and scored as zero only if all measures in the bundle are not restrictive. Finally in cases where one restriction renders others irrelevant, those measures that are rendered irrelevant are automatically scored one. The paper presents the general methodology that applies to the core measures found in all sectors as well as sector-specific scoring where relevant.

Keywords: Services trade restrictions, composite indicators

JEL classification: C10, C80, F13, F14, F53

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The STRI project for each sector started with an expert meeting where the list of measures was discussed. The STRI team is grateful for the insights and advice that the participants brought to the meeting. The STRI database has been put together by going through laws and regulation in each of the 40 countries included. Each entry is documented by the source and a web link to the law or regulation and each government has fact-checked the database. Needless to say this has been an enormous task and the OECD Secretariat would like to thank Member governments for reviewing and peer reviewing the databases. We will also like to thank Mariam Abdova, Beatriz Cano Buchholz, Ekaterina Burdina, Stellina Galitopoulou, Ahmet Gulsen, Dora Hajdu, Anthony Halley, Anna Jankowska, Gimin Kang, Fatma Kayhan, Yunhee Kim, Maria Kopyta, Hendric Richter, Humberto Lopez Rizzo, Baron Sacharidis, Katharina Sass, Jonathan Senft, Marie Sudreau, Lucie Vondrackova, Jozefien Willemen and Aviad Ben Yehuda who provided excellent research assistance in creating the database. Also thanks to the University of Adelaide and project managers Christopher Findlay and Uwe Kaufman for creating the database for Key Partners. Special thanks to Rainer Lanz and Alexander Ragoussis for their contribution to the design of the STRI methodology. The weighting scheme for the STRI indices is derived from an online survey. Thanks to everybody that took time to do the survey. Finally, the authors would like to thank Dale Andrew, Crawford Falconer and Raed Safadi for useful comments and inputs. The paper benefitted from discussions in the OECD Working Party of the Trade Committee, which has agreed to make the study more widely available through declassification on its responsibility.

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I. Introduction

Make things as simple as possible, but not simpler (Albert Einstein).

This note presents the scoring and weighting system for the STRI indicators for 18 sectors: *audio visual services (motion pictures, television and broadcasting, sound recording), computer services, construction, courier services, distribution services, financial services (commercial banking and insurance) professional services (accounting, architecture, engineering, legal), telecommunications and transport services (air transport, maritime freight transport, road freight transport, rail freight transport)*. The system has been designed with the aim to make it as simple as possible, yet to capture both the complexity of services trade policies and reconcile a simple system with the fact that measures are linked to each other, and in some cases, constitute a hierarchy. The methodology draws from a number of sector studies, expert meetings¹ and from the literature on composite indicators (OECD, 2008a). The STRI is a measure of MFN restrictions and does not take into account any specific concessions such as, for example regional trade agreements or mutual recognition agreements. The scoring and weighting system applies to the STRI database that currently contains 40 countries, the 34 OECD Member countries and Brazil, the People's Republic of China, India, Indonesia, the Russian Federation and South Africa. The STRI database contains factual information on laws and regulation which is documented with a reference to the source. The database does not cover, and the STRI indices do not take into account implementation of laws and regulation or business perceptions of such implementation.

The policy measures² are grouped under the same five policy areas in all sectors:

- Restrictions on foreign entry
- Restrictions on the movement of people
- Other discriminatory measures
- Barriers to competition³
- Regulatory transparency

There is a core of measures that are common for all sectors, although, of course, the restrictiveness of these general measures may vary across sectors within a country. For instance foreign equity limits are a general measure included in all sectors, but the equity

-
1. Expert meetings were organised for each sector with the objective of coming up with a list of measures to include in the STRI database. Each Member country was invited to nominate an expert and in addition BIAC, WTO, the World Bank and other international organisations including other OECD Directorates covering the sector in question were invited.
 2. Please note that the term “measure” in this paper is not a term of art or intended to have any legal significance.
 3. Barriers to competition entail public ownership measures, which may have the effect of market access restriction.

limits, if any, vary from one sector to the next. In addition to the general core measures, there are sector-specific measures that capture the characteristics of each sector. For instance, in professional services the licensing system is central to the market structure, and for this sector the licensing system and related procedures are captured in great detail. By the same token, competition issues related to the possible presence of a dominant supplier is central to the way the telecommunications sector is regulated. Thus, a number of telecommunications-specific competition policy measures are included. Finally, public procurement constitutes a large share of the market for construction services, and eligibility for public contracts is treated more thoroughly in this sector than the others.

The scoring and weighting system is based on a simple structure:

- The individual policy measures are assigned a score of 0 (not restrictive) or 1 (restrictive);
- Under each of the five policy areas all measures are assigned the same weight;
- The five policy areas are weighted according to relative importance. Experts have distributed 100 points among the five policy areas according to how they see the relative importance for each sector. The weights applied use the results of this expert judgment exercise. Thus, the same policy area takes a different weight in different sectors.

This is the basic structure. However, not all measures in the database are binary, and some measures are linked and some are clearly more important than others. For instance, foreign equity limits, duration of stay of intra-corporate transferees, time to get a business visa and a number of other measures are continuous. These are reconciled with a binary scoring system by introducing brackets and thresholds such that, for example, the lower the foreign equity limit, the more one-scores are assigned to this set of measures. Linkages between measures occur when one measure strengthens or weakens others, or renders others obsolete. If foreign equity is not allowed at all, for instance, then all measures related to the establishment of commercial presence through a subsidiary are affected. In order to capture such linkages, a hierarchy of measures is established, and the measure on top of the hierarchy determines the scoring of measures further down in the hierarchy.

Conceptually, it is possible to capture all the details embedded in the raw data by a binary scoring system. However, the purpose of an index is to provide a snapshot of trade restrictiveness in a country and sector at a particular point in time. Therefore, capturing all details is not desirable. The challenge is to strike the right balance between being sufficiently detailed and nuanced to give an accurate picture – and seeing the wood for the trees. The STRI indices give this snapshot while the STRI database provides the necessary details for those who want to go beyond the quick snapshot provided by the indicators.

This paper explains in detail the deviations from the simple system sketched in the bullet points above. The hierarchies of measures and how the continuous measures are broken down to binary scores are presented for general measures in the next section and sector-specific measures in subsequent sections. Box 1 gives an overview of the structure of the STRI database, and Annex C provides a complete list of measures included in the STRI database.

Box 1. The coding system in the STRI database

The code synthesizes the information by combining letters and numbers in the following manner: The sector identifier is a combination of two capital letters for the sector and three lower case letters for subsectors when relevant.

Sector	Code
Audio visual services	AS
Motion pictures	AS.mot
Television and broadcasting	AS.brd
Sound recording	AS.sou
Computer services	CS
Construction	CO
Courier services	CR
Distribution services	DS
Financial services	FS
Commercial banking	FS.bnk
Insurance	FS.ins
Professional services	PS
Legal services	PS.leg
Accounting services	PS.acc
Architectural services	PS.arc
Engineering services	PS.eng
Telecommunications	TC
Transport services	TR
Air transport	TR.air
Maritime transport (freight)	TR.mar
Road transport (freight)	TR.rof
Rail transport (freight)	TR.rai

The policy heading identifier named “type” is the same across sectors:

1. Restrictions on foreign entry
2. Restrictions on the movement of people
3. Other discriminatory measures
4. Barriers to competition
5. Regulatory transparency

The measure identifier within the policy areas (types) is unique to the measure. Numbering starts with the measures that are common to all sectors followed by measures that are unique to one or more sectors, such that the more sector-specific, the higher the identifier number, and the horizontal measures have the same measure identifier across sectors.

The sub-measure identifiers (details and nuances) are numbered in the order they appear and are harmonised across sectors when relevant.

Example

PS.leg.2.3.0	<i>Duration of stay for natural persons is limited (months)</i>
PS.leg.2.3.1	Limitation on duration of stay for intra-corporate transferees (months):
PS.leg.2.3.2	Limitation on duration of stay for contractual services suppliers is limited to (months):
PS.leg.2.3.3	Limitations on duration of stay for independent services suppliers is limited to (months):

The measure *Duration of stay for natural persons is limited (months)* under the policy heading *Restriction on the movement of people* (**type = 2**) is collected for all sectors (**identifier = 3**) with 3 sub-measures (**identifier = 1, 2, 3**) and in the case of Legal services the code for all the measures starts with ‘**PS.leg**’.

II. General measures

This section explains the scoring system for continuous general measures that are common to all sectors as well as hierarchies of measures common to all sectors.

Foreign equity limits are a continuous variable ranging from zero, when no foreign equity is allowed, to 100%, when there are no restrictions. The measure is divided into four brackets as follows:

- Less than 100% allowed
- Less than 50% allowed
- Less than 33% allowed
- Zero foreign equity allowed

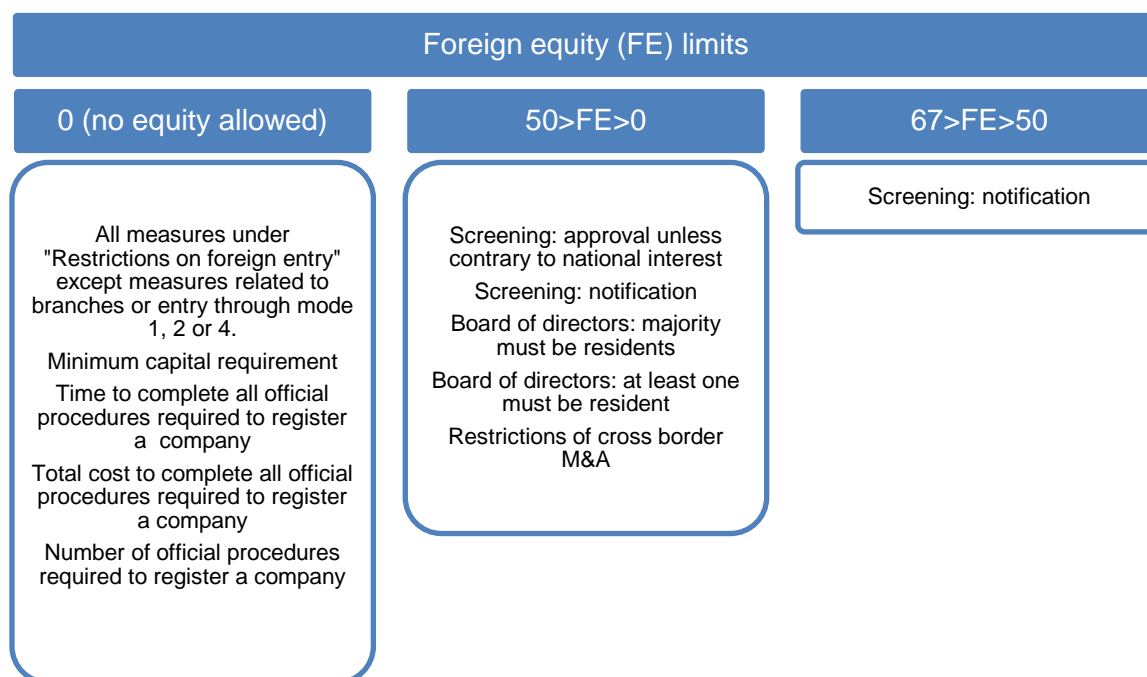
If there are no restrictions, the measure is scored zero. If foreign equity is not allowed at all, there will be four scores of one, since all brackets will be scored one. Thus, if zero equity is allowed, less than 100, less than 50 and less than 33% follow logically. By the same token if the foreign equity limit is 49%, then there will be two one-scores, adding up less than 50% and less than 100%.

The measure on indirect foreign ownership is scored one if the equity foreigners can hold in local investment companies is less than a third which is commonly the limit for a blocking minority.

Foreign equity restrictions will also have a bearing on the scoring of some other measures. If, for instance, foreign equity is not allowed, lack of screening or restrictions on board members does not represent a liberal trade policy, but is rather made redundant by the equity restriction. When neither foreign equity nor foreign branches are allowed, all measures related to commercial presence will automatically be scored one.⁴

This way of scoring ensures that if a country eliminates foreign equity restrictions, for example, but introduces screening instead, the overall score on the STRI index will improve. Figure 1 presents linkages between foreign equity restrictions and other measures.

4. In the case of construction services, a distinction can be made between short-term and long-term commercial establishment. This is due to the manner in which construction firms enter a foreign market, which varies from the duration of a particular project to a more permanent presence in overseas markets. The former is considered in international trade statistics as cross-border trade in the sector, and can be significantly affected by restrictions on the establishment of branches or representative offices. Hence, when there is a ban on foreign ownership and branches or representative offices are not allowed, trade in construction services through both long-term and short-term (cross-border trade) commercial presence is prohibited.

Figure 1. Measures that are automatically scored one as a consequence of foreign equity limits

If there is a statutory monopoly covering all activities under the definition of a sector, the STRI index is scored one, no matter what the other regulations are. If there is a statutory monopoly covering some activities in the sector, this is scored and weighted as follows:

- The measure recording whether there is a statutory monopoly is scored 1
- This measure is given a weight corresponding to the share of the market covered by the monopoly (x %). The share has been calculated as the average for all countries where possible to avoid endogeneity problems.
- The weights of all other measures are adjusted by (1-x).

The next general measure for which thresholds are used for scoring is duration of stay for natural persons, which is scored using two brackets. Temporary movement of natural persons is not clearly defined in the GATS, but three to five years are commonly mentioned. Two thresholds for duration of stay for natural persons are introduced for the scoring:

- Less than 36 months
- Less than 12 months

If natural persons can stay 36 months or more the score is zero. If natural persons are allowed to stay less than 12 months, both brackets are scored one. If natural persons in one or more of the categories of natural persons are not allowed at all, both brackets of duration of stay for those categories are automatically scored one. For contractual services suppliers the score is zero also if the duration of stay is linked to the length of the contract as long as the length of the contract is not restricted to be less than 36 months. Thus, if regulation requires that a contractual services supplier with a contract of 6 months gets a visa for 6 months, the scoring is zero as long as the importing firms are allowed to freely choose the duration of the contract within the range of 0-36 months. If natural persons are not allowed at all (or there is a zero quota) all the other variables related to restrictions on movement of people (mode 4) are scored one as well.

Several measures under the policy area *Regulatory transparency* are continuous variables. These are transformed into binary scores by identifying a threshold above which time, costs or number of procedures are considered an administrative burden and scored one. The thresholds are depicted in Table 1. Further details are found in Annex A.

Table 1. Thresholds for continuous measures under policy heading “Regulatory transparency and administrative requirements”

Measure	Threshold above which the score is one
Range of visa processing time (days)	10 working days
Time to complete all official procedures required to register a company (in calendar days)	World Bank Doing Business Indicators – Starting a business: value of the 25 th percentile for 183 countries taking the average over 2004-2011: 20 days
Total cost to complete all official procedures required to register a company (in USD)	World Bank Doing Business Indicators – Starting a business: value of the 25 th percentile for 183 countries taking the average over 2004-2011: 8.6% of income per capita
Number of official procedures required to register a company	World Bank Doing Business Indicators – Starting a business: value of the 25 th percentile for 183 countries taking the average over 2004-2011: 7 procedures
Time to complete all official procedures required to build a warehouse (in calendar days)	World Bank Doing Business Indicators – Dealing with construction permit: value of the 25 th percentile for 182 countries taking the average for 2004-2011: 138 days
Total cost to complete all official procedures required to build a warehouse (in USD)	World Bank Doing Business Indicators – Dealing with construction permit: value of the 25 th percentile for 182 countries taking the average for 2004-2011: 57.6% of income per capita
Number of official procedures required to build a warehouse	World Bank Doing Business Indicators – Dealing with construction permit: value of the 25 th percentile for 182 countries taking the average for 2004-2011: 14 procedures
Time of resolving insolvency (in years)	World Bank Doing Business Indicators – Resolving insolvency: value of the 25 th percentile for 137 countries taking the average for 2004-2011: 2 years
Cost of resolving insolvency (in % of the estate value)	World Bank Doing Business Indicators – Resolving insolvency: value of the 25 th percentile for 137 countries taking the average for 2004-2011: 9% of the estate value
Time taken between the submission of an accepted customs declaration and customs clearance (days)	World Bank Doing Business Indicators – Trading across borders: 2 days
A de minimis regime is in place (in USD)	100 USD

Note: While the cost to complete all official procedures for the registration of a company is collected in USD, the threshold is calculated using the cost as a percentage of income per capita.

The value of 10 working days (2 weeks) has been chosen as the reasonable limit beyond which the administrative process would impact negatively the activity of the services provider requesting a short-term business visit visa.⁵ For the World Bank Doing Business indicators – *Starting a business*, *Dealing with construction permits* and *Resolving Insolvency*, the thresholds have been calculated as the 25th percentile of the average value for the 2004-11 period for the population of countries covered by these indicators. Thus, countries that perform better than the 25th percentile average over this period get a score of zero. The absolute level of the *thresholds* will be kept constant, while the *entry in the database* for each

5. In order to have comparable information on visa processing time, information on visa processing time is gathered from all Member countries’ embassies in India, Australia and Japan. For Australia, India and Japan their US embassies are consulted. The number entered in the database is the simple average of these three. India is chosen because all OECD countries require a visa for business visitors from that country and India is the second largest exporter of services other than transport and travel in the world.

country is for the latest available year, which ensures that the STRI indices capture the current situation and are comparable over time.

Public procurement is covered by one measure in sectors where public procurement is a small share of the overall market. In sectors where public procurement is an important market, notably construction, restrictions on access to the public procurement market are covered in more detail. In such cases, if there is *Explicit access discrimination in favour of local firms*, all other measures on public procurement are scored one.

Audio-visual services, computer services, construction and distribution services are scored according to these general principles and are not further discussed in the document. Professional services, telecommunications and transport on the other hand, are subject to more complex sector-specific regulation which requires a more complex scoring system, which is explained in the following sections. Sector specific scoring in courier services and financial services are explained in Section VI.

III. Scoring in professional services

Background

Professional services covered in the STRI are legal, accounting, architectural and engineering services. These services are generally supplied directly by providers in foreign markets and are associated with the international movement of capital and labour (and accompanying knowledge). International trade takes place to a large extent through firms establishing a commercial presence in foreign markets (mode 3) and by professionals travelling overseas (mode 4). These services can also be traded cross-border (mode 1) either incorporated into products (such as a CD) or transmitted via the telecommunication networks.

The greatest source of market failure associated with the provision of professional services is asymmetric information. Since the defining characteristic of these services is the high level of technical knowledge of the professional, the information available to the provider and the consumer is different. Mechanisms to ensure quality of the service through high standards of education and training are thus generally viewed to be appropriate. Though terminology differs across countries, such mechanisms typically take the form of licensing and qualification requirements.

From a trade perspective, the main question surrounding these measures relates to whether they are transparent and non-arbitrary in light of their public-policy objectives. The fundamental basis for such measures arises from the variability of qualifications, and from the inability of local regulators to assess foreign professional qualifications, training and experience. Foreign professionals may be required to demonstrate their skill and familiarity with local requirements through education, training and examinations. Another aspect relates to the transparency and the procedural steps needed to acquire licenses.

In the legal profession, one of the sectors where qualification and licensing requirements are the most stringent, law firms wishing to operate in foreign markets often do not provide legal services in host country law. Rather, they limit themselves to services for which they are qualified – domestic, third-country and international law – and hire or associate with locally-qualified lawyers or firms. This has led to the introduction of so-called “limited licensing” in some countries, which creates an additional channel for entry into foreign markets. Limited licensing concepts, though not so developed, are also relevant in other professions.

Scoring methodology

The scoring methodology should account for the hierarchy of and the joint effect of regulation. For instance, if no foreign equity is allowed, measures related to foreign firms such as restrictions on the board of directors become irrelevant. Other examples are nationality requirements for local licences, which render residency requirements and restrictions regarding the recognition of foreign qualifications irrelevant. In such cases where a measure of higher hierarchy is binding, the related measures of lower hierarchy are scored as restrictive.

Besides their hierarchical nature, some measures are linked to each other and have, when combined, a stronger effect on restricting trade as opposed to when each measure acts in isolation. Notably, if a nationality requirement to practice legal services is combined with no possibility for limited licensing for foreign providers, these two impediments alone effectively

prohibit market entry through the movement of people. If in addition there is a requirement that only locally licensed lawyers can own equity in a law firm, the sector would be completely closed.

Measures closing all modes of supply

Imports of legal services would be prevented through a combination of the following measures (see Figure 2 below):

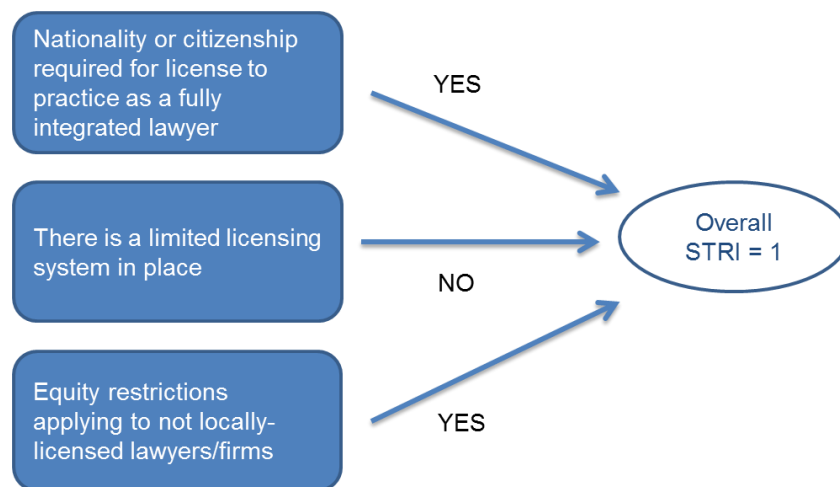
- (i) Equity restrictions requiring that only locally-licensed lawyers can own shares in law firms;
- (ii) Nationality or citizenship required to practice as a fully integrated lawyer⁶;
- (iii) No limited licensing system is in place.

Similarly, imports would not be possible with the following combinations of restrictions:

- (i) Ban on foreign ownership or no legal form allowed;
- (ii) Nationality or citizenship required to practice as a fully integrated lawyer;
- (iii) No limited licensing system is in place.

Furthermore, the simultaneous occurrence of measures (ii) and (iii) in both cases above makes it impossible for natural persons to serve the market, i.e. mode 4 is closed. Accounting, architectural and engineering services are scored analogously.

Figure 2. Restrictions preventing trade in legal services



Scoring related to licensing

Figures 3 and 4 below show in detail the measures that are scored as restrictive respectively when there is a nationality requirement for the local license to practise alone; and when both full licensing and limited licensing are not possible. When both full licensing and limited licensing are not allowed, trade through mode 4 is prohibited. Figure 4 indicates that in such case additional measures are scored as restrictive compared to situations when only

6. Equivalent to a nationality requirement is the case when foreign providers have to completely retrain, i.e. re-do the university degree, practice and exam, in the domestic country.

full licensing is prohibited, reflecting the importance of limited licensing in providing for an alternative channel to access the domestic market.

Figure 3. Nationality requirement to practice

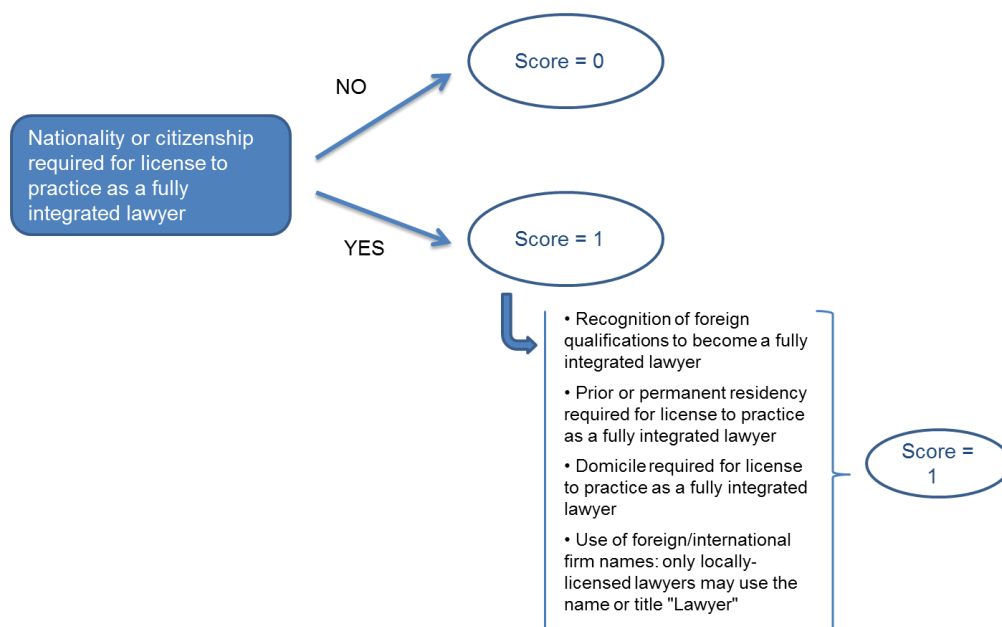
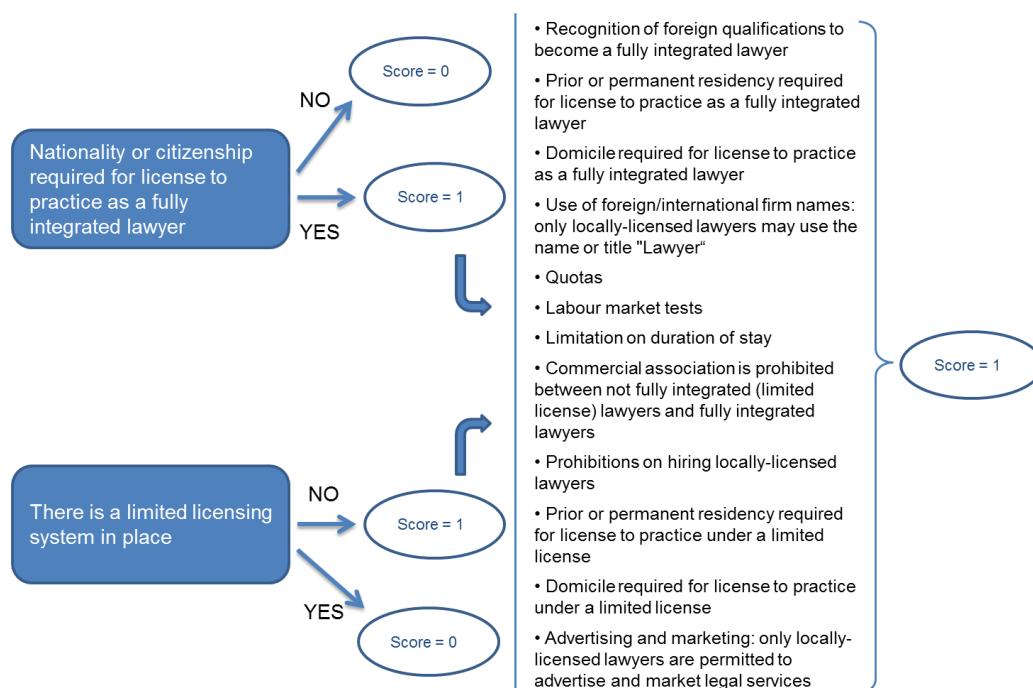


Figure 4. Nationality requirement to practice combined with no limited licensing possible



Scoring related to commercial presence, full and limited licensing

Figure 5 shows the measures that are scored as restrictive when mode 3 is closed through a ban on foreign equity. Accounting, architectural and engineering services are scored analogously.

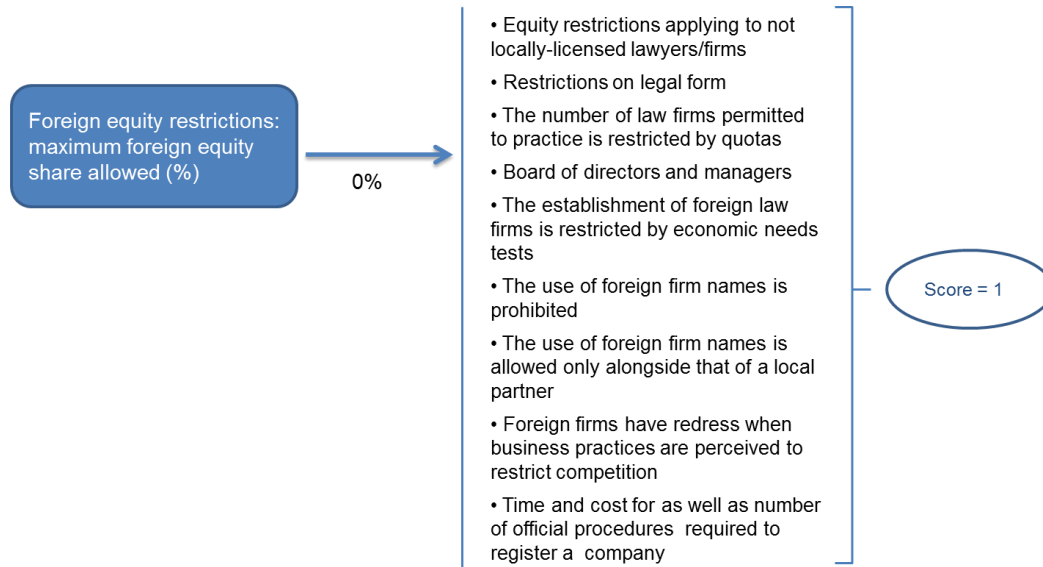
Figure 5. Ban on foreign equity

Figure 6 indicates the additional measures that are scored as restrictive when a ban on foreign equity is combined with no possibility for full licensing. These two measures have a very restrictive impact on modes 3 and 4. Figure 7 shows the effects of limited licensing on these modes. Indeed, if limited licensing is available, fewer measures are scored as restrictive when both nationality requirements and equity restrictions related to licensing are in place. Alternatively, if limited licensing were not possible, the sector would be closed to foreign competition (see Figure 2 above). Accounting, architectural and engineering services are scored analogously.

Figure 6. Ban on foreign ownership and nationality requirement to practice

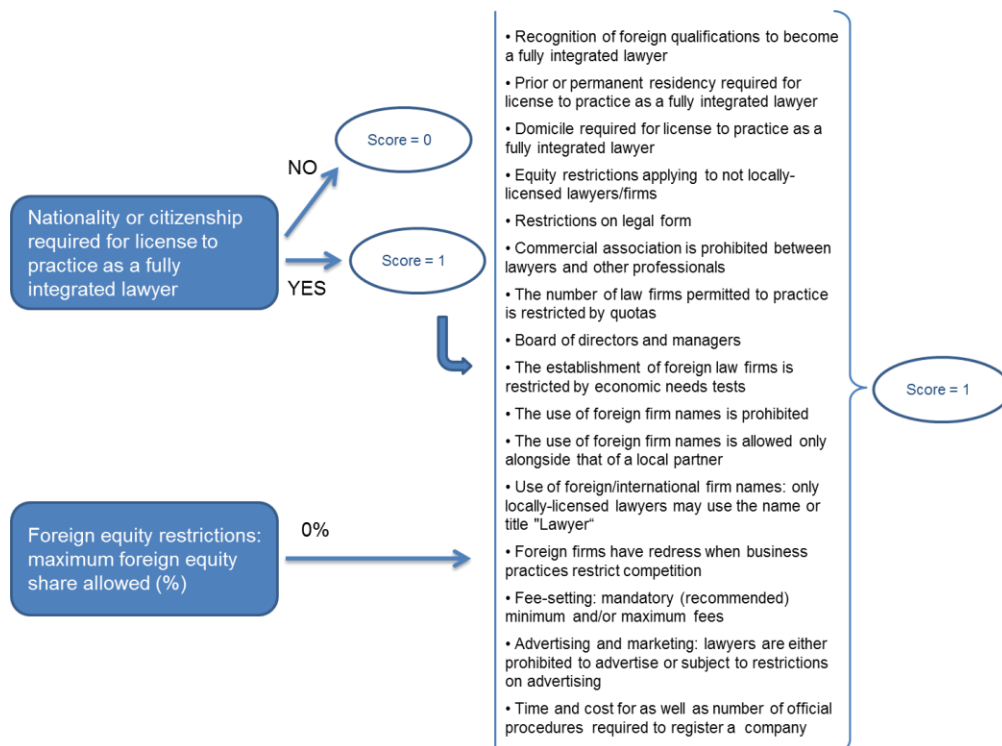
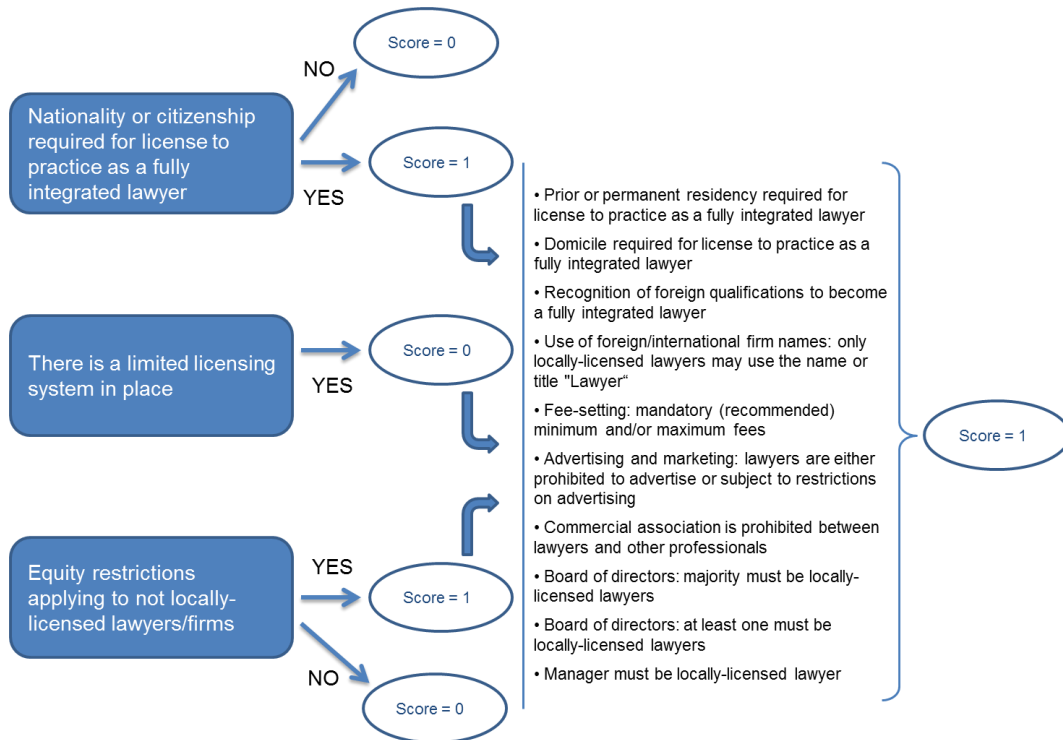


Figure 7. Equity restrictions based on licensing, nationality requirement and availability of limited licensing



IV. Scoring in telecommunications

Background

This section explains scoring in telecommunications under the policy area *Barriers to competition*. The other policy areas are scored as explained in Section II for general measures.

Telecommunications is a sector subject to inherent market imperfections such as network externalities, network effects and economies of scale. These market imperfections create barriers to entry and most countries have found it necessary to introduce *ex ante* regulation in cases where barriers to entry are high and non-transitory, where there is no trend towards the emergence of a competitive market in the medium term and where market imperfections cannot be adequately addressed by *ex post* regulation through the general competition law.

Rapid technological progress in the telecoms sector leads to changes in market structure. In some cases technical development reduces barriers to entry, but in other cases entry costs may rise. It is therefore common practice to review markets and assess the need for *ex ante* regulation at regular intervals. It is also common practice for the regulator to identify services suppliers with a dominant market position and impose obligations on this/these firm(s) in order to ensure that services are supplied at prices and quality similar to what would be the case in a competitive market.

These characteristics of the telecommunications sector have prompted a more prominent role for competition policy in international trade agreements than for other sectors. For example, the WTO reference paper on telecommunications addresses the need for access and interconnection to complement market access and national treatment commitments in order to ensure open and competitive markets. Likewise, a number of regional trade agreements have provisions related to access and interconnection to local telecommunications networks. The free trade agreement between the United States and Australia, for instance, contains articles on access to and use of public telecommunications services, interconnection, treatment of dominant firms (or major suppliers) and regulatory procedures.

The list of measures under barriers to competition and public ownership is presented in Table 2. The last two columns identify measures that are needed to keep markets competitive whether or not there is dominance, and additional measures that are imposed on dominant suppliers respectively.

Table 2. Measures under barriers to competition and public ownership

Barriers to competition and public ownership	Apply under any market structure	Additional measures, dominant supplier(s)
The decision of the regulator can be appealed	X	
Foreign firms have redress when business practices are perceived to restrict competition in a given market	X	
National, state or provincial government control at least one major firm in the sector (fixed, mobile, Internet)	X	
Publicly-controlled firms or undertakings are subject to an exclusion or exemption, either complete or partial, from the application of the general competition law (fixed, mobile, Internet)	X	
There are statutory or other legal limits to the number or proportion of shares that can be acquired by foreign investors in firms that are controlled by national state or provincial governments (fixed, mobile, Internet)	X	
National state or provincial government have special voting rights (e.g. golden shares) in any firms in the sector (fixed, mobile, Internet)	X	
The government can overrule the decisions of the telecommunications regulator	X	
Access to and use of public telecommunications service is mandated (fixed, mobile, Internet)		X
Wholesale access prices are regulated (fixed, mobile, Internet)		X
Interconnection is mandated (fixed, mobile)	X	
Interconnection prices and conditions are regulated (fixed, mobile)		X
Interconnection and/or access agreements are made public		X
Unbundling of the local loop is required*		X
Local loop unbundling prices are regulated*		X
Collocation or site sharing is mandated		X
Resale of public telecommunications services to other suppliers of telecommunications services, including foreign suppliers are mandated (fixed, mobile)		X
Rates and conditions for resale by dominant firms of public telecommunications services to other suppliers of telecommunications services are regulated (fixed, mobile)		X
Secondary spectrum trading is allowed	X	
Mobile termination rates are regulated		X
Wholesale roaming rates are regulated	X	
Retail roaming rates are regulated	X	
Number portability is required (fixed, mobile voice over Internet protocol)	X	
Time and conditions for porting are regulated (fixed, mobile, voice over Internet protocol)	X	
Dialing parity is required (fixed, mobile, voice over Internet protocol)		X
Vertical separation is required (fixed, mobile, Internet)		X
Contracts for universal services obligations are assigned through grandfathering (fixed, mobile, Internet)	X	

* Measures do not apply to Next Generation Networks

The measures that apply under any market structure are scored individually on the basis of the restrictiveness or otherwise of the measure in question. There is, however, one exception. In the past, telecommunications services were provided by a state-owned monopoly in virtually all countries. The incumbent's market power and ability to abuse it is still an issue in some countries. One way that incumbents may delay and restrict entry of competitors is to endlessly appeal the regulator's decisions on matters such as mandating the incumbent to provide entrants with access to its network. This is captured in the scoring

system as follows: “The decision of the regulator can be appealed”: if the answer is NO, the score will always be one. If the answer is YES, the score will normally be zero, but if *both* a major service provider is controlled by government, *and* the government can overrule decision by the regulator, then the score will be one.

Two scoring regimes: facilities-based competition or dominant supplier

Regulation is necessary in order to ensure open and competitive markets in cases where high and non-transitional entry barriers are present. However, regulation is also a burden that should be rolled back when no longer needed. Thus, the telecommunications law typically provides the regulator with a range of measures that it may impose on dominant firms, and also allows it to roll back regulation when competition has been established. In the case of contestable markets, deregulation may encourage investment in infrastructure. Finally, Next Generation Networks (NGN) pose different regulatory challenges and it is unclear whether access to unbundled fibre loops would be the best remedy, Local loop unbundling and related measures are therefore not taken into account in the case of NGN.

A useful starting point is to analyse the chain or stream of inputs and services needed in order to reach the final customer. The first step is to identify the least replicable element in the chain and find out how access to this element is ensured if it is indeed not replicated. Given that the least replicable element is accessible, the next step in the analysis is to look at the second to least replicable element in the chain of inputs and so on.

Fixed locations

For services provided at fixed locations (fixed line telephony and Internet), the least replicable element is the local loop. Where facilities based competition is not feasible, unbundled access to the local loop at reasonable rates and conditions is important for the creation of a competitive or contestable market. Effective regulation requires information on costs. Therefore, cost accounting obligations or other measures that ensure that costs are disclosed, may be required as part of the regulatory package.

In the event of a dominant firm, local loop unbundling is a necessary but often not sufficient regulation in order to ensure that state of the art services are delivered at competitive prices. The second to least replicable element in fixed line telephony is wholesale call termination. Call termination is a monopolistic market and the regulatory measure usually applied is regulation of termination rates.

The third to least replicable element in the fixed line telephone chain of inputs is access and call origination. Regulatory measures commonly found are the mandating of access combined with access price regulation and transparency requirements. Examples of the latter are requirements that access agreements or a reference offer are made public; or accounting separation. Transparency measures are imposed in order to enforce regulations on price and other conditions for access and/or interconnection. Transparency alone is rarely considered sufficient when there is a dominant supplier.

New entrants may enter the market at different levels in the network. The entry point with the lowest entry cost is through the resale market where an entrant buys wholesale services from the incumbent for resale either in combination with other services provided by the entrant or alone, in competition with the incumbent’s own retail services. Mandating resale is considered pro-competitive in the presence of a dominant supplier.

Mobile

Wholesale call termination is the least replicable element in the mobile chain of services. As for fixed line services, termination constitutes a monopolistic market if the caller pays. If the receiver pays, the market for termination of mobile calls may well be competitive. Price regulation is the most common measure in this segment. The second to least replicable

element is access and call origination. In a number of OECD Member countries mobile access and origination are considered competitive and are no longer regulated. In the case of dominant supplier, the same logics as for fixed line telephony apply to access regulation.

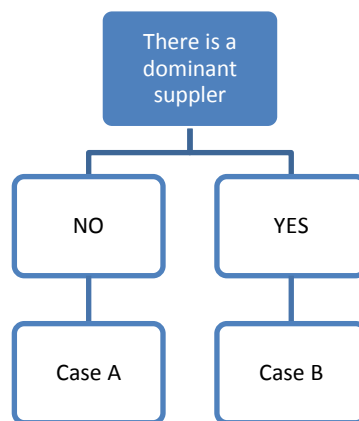
Interconnection, fixed and mobile

Interconnection is regulated in several ways from mandating interconnection combined with price regulation and other conditions, to requiring services suppliers to negotiate interconnection agreements upon request. New entrants, foreign as well as local, may start with a small subscriber base and have less bargaining power than the incumbent(s). Therefore, a requirement that incumbent providers must negotiate interconnection in good faith upon request should be in place whether there is a dominant supplier or not.

Scoring: two cases

The need for regulation depends on the market structure for which two different scenarios are considered: Facilities-based competition has been established and the case when there is one or more dominant suppliers.⁷ These two cases represent two different regulatory regimes and two different scoring systems. A memo in the STRI database records whether or not there is a dominant supplier in each of the markets (fixed, Internet and mobile) and the memo constitutes a switch between the two scoring systems as illustrated in Figure 8.

Figure 8. The two scoring systems under the heading “Barriers to competition and public ownership”



The next two figures present the scoring system used in each case.

7. In the future, services-based competition may need to be considered as a third scenario.

Figure 9. Scoring the barriers to competition and government ownership – dominant firm

Case A Facilities based competition					
Measures not considered Unbundling of the local loop is required; Colocation or site sharing is mandated; Access to and use of public telecommunications services is mandated; Dialling parity is required;		Regulations considered Local loop unbundling prices are regulated; Vertical separation is required; Wholesale access prices are regulated; Interconnection prices and conditions are regulated; Interconnection and/or access agreements are made public; Mobile termination rates are regulated; Resale of public telecommunications services to other suppliers of telecommunications services, including foreign suppliers is mandated; Rates and conditions for resale of public telecommunications services to other suppliers of telecommunications services are regulated		Regulation considered necessary for competition Interconnection is mandated	
YES	NO	YES	NO	YES	NO
0	0	1	0	0	1

Note: Local loop unbundling and related measures are not considered in the case of NGN.

Case B
Dominant supplier(s)

<p>Bundle 1</p> <p>Unbundling of the local loop is required; Local loop unbundling prices are regulated; Colocation or site sharing is mandated; Accounting separation is required;</p>	<p>Bundle 2</p> <p>Access to and use of public telecoms services is mandated; Wholesale access prices are regulated; Interconnection and/or access agreements are made public or Accounting separation is required</p>	<p>Bundle 3</p> <p>Interconnection is mandated; Interconnection prices and conditions are regulated; Interconnection and/or access agreements are made public or Accounting separation is required</p>	<p>Bundle 4</p> <p>Resale of public telecom services to other suppliers of telecoms services, including foreign suppliers is mandated; Rates and conditions for resale of public telecoms services to other suppliers of telecom services are regulated</p>	<p>Stand-alone measures</p> <p>Mobile termination rates are regulated; Dialling parity is required</p>
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All YES	At least one NO	All YES	At least one NO	All YES	At least one NO	Both YES	At least one NO	YES	NO
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0	1	0	1	0	1	0	1	0	1
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Note: Local loop unbundling and related measures are not considered in the case of NGN

In case A, the measures considered are scored zero if the regulator has assessed the market, found it to be competitive and decided not to impose ex ante regulation or to forbear from regulation. The measures considered are scored 1 in case A if the regulator has found the

market to be competitive but still does not roll back or forbear from price regulation. This could happen, for instance, if the regulator is weak or overruled by the government.

The example of dominant supplier(s) can be seen in Case B. In this scenario regulation is necessary in order to induce incentives for the dominant supplier to provide state-of-the-art services at competitive prices. The most commonly found policy measures towards these objectives are first to regulate access and access prices, which will also allow foreign suppliers to enter the market. Second, in order to get price regulation right, the regulator must have information on the cost structure of the relevant service. Mandating a reference agreement, requiring cost accounting or mandating vertical separation, in most cases accounting separation, are measures commonly imposed for that purpose. It is noted that measures are lumped together in bundles to reflect the complementarities between them.

In comparing the two cases it is noted that some measures are considered only in the case of dominant suppliers and are not seen as a barrier whether the regulator chooses to impose or maintain the regulation or not. These are mainly related to physical access to the least replicable network elements. Other measures are considered a burden and barrier to competition if imposed in a competitive market, but are necessary in cases of dominant suppliers. These are mainly related to price control. The rationale for this is that dominant suppliers tend to charge monopoly prices, and should be prevented from such behaviour, while competitive and contestable markets tend to get prices right.

V. Scoring in transport services

Sector-specific scoring

Transport services are traded through all modes of supply and sometimes subject to complex regulation. Sector-specific hierarchies and complementarities are explained below.

Air transport

Sector-specific hierarchies in air transport can relate to establishment abroad and cross-border trade. For instance, foreign equity limits can affect airlines in either domestic or international traffic, or both. This has implications for the scoring of other measures. In addition, linkages between measures can occur with respect to regulations restricting different modes of supply. Notably, if limitations on foreign ownership in airlines providing domestic traffic are combined with a restrictive policy on cabotage in bilateral agreements, domestic traffic would be completely closed.

Cross-border trade

Market access via mode 1 in aviation occurs through the exchange of traffic rights largely on a bilateral basis. Without such rights, traffic cannot take place unless the authorities grant it on a discretionary basis. The STRI covers the nine so-called “freedoms of the air” as defined by ICAO (see Box 2). In this sector, therefore, the scoring system has to take into account also bilateral measures as opposed to only unilateral, MFN restrictions.

Box 2. Freedoms of the air

First freedom. The right or privilege, in respect of scheduled international air services, granted by one party to another party or parties to fly across its territory without landing.

Second freedom. The right or privilege, in respect of scheduled international air services, granted by one party to another party or parties to land in its territory for non-traffic purpose.

Third freedom. The right or privilege, in respect of scheduled international air services, granted by one party to another party to put down, in the territory of the first party, traffic coming from the home party of the carrier.

Fourth freedom. The right or privilege, in respect of scheduled international air services, granted by one party to another party to take on, in the territory of the first party, traffic destined for the home party of the carrier.

Fifth freedom. The right or privilege, in respect of scheduled international air services, granted by one party to another party to put down and to take on, in the territory of the first party, traffic coming from or destined to a third party.

Sixth freedom. The right or privilege, in respect of scheduled international air services, of transporting, via the home party of the carrier, traffic moving between two other parties.

Seventh freedom. The right or privilege, in respect of scheduled international air services, granted by one party to another party, of transporting traffic between the territory of the granting party and any third party with no requirement to include on such operation any point in the territory of the recipient party, i.e. the service need not connect to or be an extension of any service to/from the home party of the carrier.

Eighth freedom or consecutive cabotage. The right or privilege, in respect of scheduled international air services, of transporting cabotage traffic between two points in the territory of the granting party on a service which originates or terminates in the home country of the foreign carrier or (in connection with seventh freedom) outside the territory of the granting party.

Ninth freedom or stand-alone cabotage. The right or privilege of transporting cabotage traffic of the granting party on a service performed entirely within the territory of the granting party.

Source: ICAO's Manual on the Regulation of International Air Transport (document 9626, Part 4).

The two basic rights are third and fourth freedoms, without these rights no traffic between the two countries can take place. Considering first the two extreme cases, cross-border trade would be completely closed if:

- The country in question does not have any bilateral agreements with its trading partners; or
- Third and fourth freedom rights are not granted in any of its bilateral agreements.

In such cases, all measures related to cross-border trade contained in bilateral agreements will be scored 1. However, such extreme instances are in practice not relevant for the countries covered in the STRI project (and for most countries). Instead, it is common practice to restrict access to the domestic, point-to-point market, or cabotage. In the case of cross-border trade, such market would be closed if the country in question does not grant eighth and ninth freedom rights in any of its bilateral agreements.

Several measures contained under the different regulatory spheres in bilateral agreements generally represent alternative ways of regulating, and can be ordered or ranked by restrictiveness (see Box 3 for a description of the key provisions concerned). After ranking the alternatives from the most to the least restrictive, the measure in force, and all measures below it in the ranking are scored 1.

Box 3. Additional provisions in bilateral air services agreements: pricing, capacity and ownership

Air transport tariffs have been historically fixed and managed administratively in bilateral agreements for a number of reasons, including the prevention of anti-competitive behaviour of carriers and the development of domestic airlines. The following types of tariff clauses can typically be distinguished: (i) **airline agreement on prices**: the tariffs shall be agreed between the designated airlines concerned and shall be subject to the approval of the two aviation authorities; if the designated airlines cannot agree, the authorities shall determine the tariffs by agreement between themselves; (ii) **dual approval**: the approval of tariffs by the aviation authorities of the two countries before those tariffs can take effect; (iii) **single disapproval**: the tariffs enter into force unless disapproved by one of the aviation authorities; (IV) **dual disapproval**: the tariffs enter into force unless disapproved by the two aviation authorities; (V) **country of origin**: a party may disapprove tariffs only for originations in its own territory; (VI) **zone pricing**: involves reference points under which various types of tariff control are agreed; the parties agree to approve tariffs falling within a specified range; outside of it, one or a combination of the above may apply; and (VII) **no approval or free prices**: the tariffs shall not be subject to the approval of any party.

The control of capacity is also a main characteristic of bilateral agreements, playing an essential role in maintaining the profitability of routes. The following main types of capacity clauses can be identified: (I) **predetermination**: a prior agreement on capacity reached before operations begin, which can take the form of specified shares or of a procedure for coordination, approval and filing; (II) **Bermuda I**: contains principles which airlines must respect in relation to capacity, “an *ab initio* determination of capacity by each airline acting separately”; the parties to the bilateral agreement or their aviation authorities intervene only *a posteriori*, through consultation procedures; (III) **free determination**: consists of agreement by both parties not to impose unilateral restrictions on the volume of traffic, the frequency or regularity of service, or on the types of aircraft which may be used by the airlines designated by the other countries.

Another pillar of the regulatory system relates to rules on ownership and in particular to restrictions on foreign participation. Bilateral agreements are similar to preferential trading agreements and require a rule to establish which businesses are eligible for access to the terms of the agreement, i.e. a “rule of origin”. These provisions can take several forms: (I) **substantial ownership and effective control**: a condition that substantial ownership and effective control be vested in the designating party or its nationals; (II) **community of interest**: a party accepts a foreign designated airline to operate the agreed services under the condition that substantial ownership and effective control is vested: a) in countries that are parties to the agreement or by any one or more of the parties themselves, i.e. a joint operating organisation or a multinational carrier created by intergovernmental agreement; or b) in countries that are not necessarily party to the agreement but are within a predefined group with a “community of interest”; (III) **principal place of business**: indicates a party’s acceptance of a foreign airline if the carrier is incorporated in the designating party and its principal place of business or permanent residence is also in the designating party; (IV) **principal place of business and effective control** (without the ownership requirement); and (V) **principal place of business and effective regulatory control**: the airline holds a valid operating licence or permit issued by the licensing authority such as an Air Operator Certificate (AOC), meets the criteria of the designating Party for the operation of international air services, such as proof of financial health, ability to meet public interest requirement, obligations for assurance of service; and the designating Party has and maintains safety and security oversight programmes in compliance with ICAO standards.

Source: ICAO’s Manual on the Regulation of International Air Transport (document 9626).

This system can be expressed as follows:

$$\# \text{ Scores of one} = n - r + 1$$

The number of restrictive scores in the hierarchy of measures in each regulatory sphere is equal to the number of measures in the hierarchy (n) less the ranking of the measure where the country in question has a restriction (r), plus one. The hierarchies that follow this pattern are presented in Table 3, Panel A shows simple hierarchies, while Panel B depicts ownership and control where at the second and third place in the ranking are two measures or combination of measures that are equally restrictive.

Table 3. Cumulative scoring, air transport

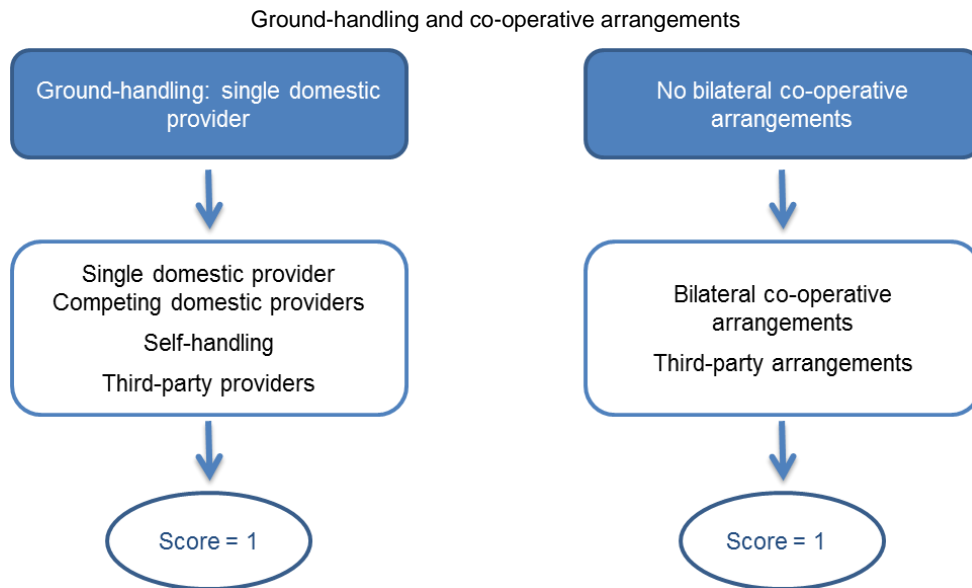
Panel A. Simple hierarchies

Rank	Capacity	Rank	Pricing	Rank	Slot allocation
1	Predetermination	1	Airline agreement on prices	1	Discretionary allocation
2	Bermuda I	2	Dual approval	2	Grandfathering
		3	Single disapproval	3	First come first served, no monetary trade allowed
		4	Dual disapproval		

Panel B. Complex hierarchy

Rank	Ownership and control	
1	Substantial ownership and effective control	
2	Community of interest	Principal place of business and effective control
3	Principal place of business	Principal place of business and effective regulatory control

In addition, some measures will be automatically scored 1 in the presence of restrictions in other categories of measures. Notably, if 5th and 6th freedom rights are not granted, route schedules (entry points for the partner country’s carriers) in relation to intermediate stops and extensions (beyond points) will be restricted.

Figure 10. Cumulative scoring in bilateral air services provisions,

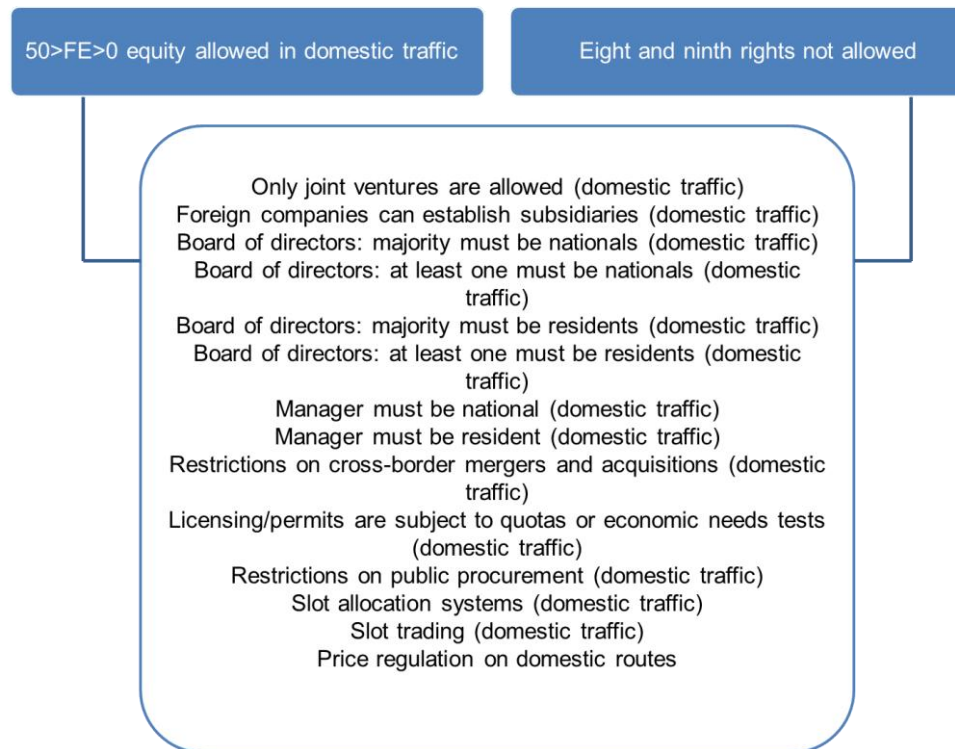
Some bilateral agreements contain asymmetric provisions, i.e. one country provides for more liberal clauses than the other. This is particularly the case for provisions on ownership and control. In such instances, two different databases are created for the country-pair in question, in order to take into account the asymmetry when calculating each country's average level of restrictiveness from its bilateral agreements.

Two alternative ways of allocating slots, first come first served coupled with monetary trading is considered and auctioning, are considered non-restrictive. These systems introduce market mechanisms in slot allocation in high demand airports. In addition, in the case of slot trading, if barter trade is not allowed, commercial exchange will be automatically set to one.

Commercial presence and the link to cross-border trade

A prominent feature of the aviation regulatory regimes in many countries is a restrictive foreign investment policy. As noted, such restrictive regimes can affect airlines in both domestic and international traffic, or only one type of traffic, with implications for the scoring of other measures. If foreign equity is not allowed with respect to both types of traffic, most measures under "Restrictions on foreign entry", as well as several measures in other policy categories become irrelevant and will automatically be scored 1. If foreign equity is not allowed in, say, international traffic only, the impact on other measures will be more limited.

Linkages between measures in different modes of supply are accounted for with respect to both international and domestic traffic. In the extreme cases noted above where a country's cross-border trade is completely closed, if in addition foreign equity is not allowed in relation to both international and domestic traffic, the sector would be completely closed. Again, such extreme cases do not apply to any of the countries covered in the STRI project. On the other hand, if cabotage is not provided for in any bilateral agreements and majority foreign equity is not allowed with respect to domestic traffic, then market entry would be prohibited only in relation to domestic traffic. This case is presented in Figure 11 below.

Figure 11. Measures that are automatically scored one when domestic traffic is prohibited***Maritime transport***

Maritime services are scored according to the general system described in Section II. The refinements in this sector relate to matching the level of importance of certain measures to the level of detail to which they are reported in the database.⁸ The measures concerned are cargo reservation schemes, restrictions on the type of vessels allowed to enter ports and restrictions on the type and quantity of cargo transported. There are five measures under cargo reservation schemes. These are aggregated into two measures in the scoring system: i) unilateral cargo reservations and ii) other cargo reservation schemes. The latter includes bilateral cargo sharing agreements, plurilateral cargo reservations, government cargo and other cargo reservations and preferential schemes. If there are any cargo reservation schemes of these categories, the aggregated measure is scored one, zero otherwise. Restrictions on the type of vessels and restrictions on the type and quantity of cargo transported are combined into one measure and scored zero if there are no restrictions on either of them and one of at least one contains a restriction.

Rail freight

Rail transport is a network industry where two types of market structure are observed: Vertically integrated rail services and vertically separated services. In the former case the same company manages the infrastructure and operates the transport services. In the latter case the two activities are separated, organisationally, functionally or in relation to accounting. In the 40 countries included in the STRI so far, vertical separation has been imposed by a regulator, and has not appeared as a market outcome.

8. Recall that the weighting of each policy area is adjusted for the number of measures.

There are no clear conclusions on under which circumstances regulatory imposed vertical separation results in a more competitive and open market. It depends on the topography of the country, population density, market size and the level of competition from other modes of transport. Once the market structure is given, however, best practise regulation can be assessed.

The STRI database contains two sets of measures under barriers to competition for the rail sector, one reflecting best practice regulation in the case of vertical integration the other in the case of vertical separation.⁹ The question on whether vertical separation is mandated serves as a switch between the two regimes.

In the vertical separation case, four measures are complementary and each are scored zero only if all of them are in place, and one if at least one is missing:

- Access to the network is mandated
- Access fees are regulated
- Access fees and conditions are made public
- Access capacity is regulated

The other measures under this market structure are scored independently from each other.

In the vertical integration case, mandated access to bottlenecks/essential facilities in the infrastructure is considered necessary if the integrated supplier is found to have significant market power. It is, however, not clear from the literature that ex ante price regulation and ex ante access regulation should be in place as long as the sector is subject to general anti-trust legislation. Therefore, measures related to prices and other access conditions are not considered (scored 0) in the case of vertical integration where a supplier has significant market power. If the vertically integrated supplier is found to operate in a competitive market (by the local regulator), price regulation and regulation on other conditions is considered a barrier to competition and scored 1.¹⁰

Independent of market structure, there is one other conditional scoring: If there are no access rights to railway infrastructure for international services, then *Interoperability/interlinking is required* is scored one automatically.

-
9. The measures recorded under *Barriers to competition* in Annex Table C.8 that refer to vertical integration and vertical separation are marked VI and VS respectively.
10. The methodology is similar to that for telecoms, but while ex ante access regulation is considered best practice in markets with a dominant supplier in telecoms, this is not the case for rail freight.

VI. Other sector-specific scoring

Courier services

In most countries, the designated postal operator (DPO) is a dominant supplier of courier services at least for delivery of letters. A memo in the STRI database records whether or not there is a dominant supplier in each of the market segments (letters, parcels and express delivery), and the memo constitutes a switch between the two scoring systems. When there is a dominant player in the market, accounting separation and appropriate cost allocation system are scored zero only when both measures are in place. These measures are bundled together to reflect the complementarities between them. In addition, non-discriminatory access to the postal network is scored zero when the regulator chooses to impose or maintain the regulation in the case that there is a dominant supplier. On the other hand, price regulations are considered a burden and barrier to competition if imposed in a competitive market. The STRI score is zero whether or not *ex ante* price regulation is in place, as long as anti-trust laws apply to the sector in the case of a dominant supplier.

In courier sector, some countries have a statutory monopoly for some services, in most cases for delivery of letters. Information on the value of services at this level of detail is not readily available. To estimate the scope of the monopoly, four thresholds are introduced; a monopoly up to 50 g, up to 1 kg, up to 2 kg, and a monopoly of the whole segment. Letters up to 2 kg are assumed to account for 80% of delivery of letters in volume, up to 1 kg account for 70%, and letters up to 50 g account for 60% of the market. If the whole segment of the delivery of letter is subject to monopoly, the market is obviously completely closed to foreign letter delivery.

Financial services

Commercial banking

Several measures are rendered irrelevant if foreign banks are not allowed to establish subsidiaries or branches in the host country. For instance, whether foreign-owned banks can be participants in national payment systems under conditions as favourable as domestic banks is of little relevance if banks that are majority-owned by foreigners are not allowed to operate in the first place. Therefore, if foreign subsidiaries are prohibited, discrimination in access to the discount window, access to capital, coverage by deposit insurance and access to payment and clearing systems are scored one. If foreign branches are prohibited, discrimination in access to the discount window and access to payment and clearing systems are scored one. If both foreign subsidiaries and foreign branches are prohibited, such that foreign investment is only permitted through minority stakes in local banks, then several measures related to commercial presence (licensing criteria, ATM networks, services reserved for domestic suppliers) are also scored one.

The measures on ATM networks are aggregated into one restriction, which records whether there exists any limitation on the expansion of ATM networks by foreign banks. The combined measure is scored one if either only domestic banks can establish their own ATM networks, or there are limits on the number of ATMs per bank, or each ATM must be licensed as a separate branch. The score is zero if none of these three regulations is in force.

One of the measures assessing the independence of the supervisor from the government is the length of the term of the head of the supervisory authority. It is scored one if there is no fixed term or if the term duration is less than five years.

Insurance

Several measures capture whether cross-border trade is allowed in general or under specific conditions for different categories of insurance. In some countries, there is a general commercial presence requirement for insurers but cross-border trade is allowed for insurance risks that cannot be covered by insurers established in the country, or for which the premium charged by domestic insurers is significantly higher. The absence of such exception when there is a general commercial presence requirement is considered as an additional trade barrier. The exception is only relevant if cross-border trade is ordinarily not permitted; if cross-border trade is allowed in general for a class of insurance, exception for domestically unavailable insurance is automatically scored zero.

If commercial presence is required for a class of insurance and there is no exception for domestically unavailable policies, then cross-border trade is entirely prohibited for that class of insurance. Therefore, the measure recording whether cross-border transactions must be carried through a resident insurance intermediary is automatically scored one. By the same token, if cross-border reinsurance provision is entirely prohibited, the measures on discriminatory financial requirements for foreign reinsurers are also scored one.

As in commercial banking, the length of the term of the head of the supervisory authority is scored one if there is no fixed term or if the term duration is less than five years.

Finally, some measures regarding auxiliary services are linked under restrictions on the movement of people. If insurance intermediaries or actuaries must be nationals of the host country, so that foreigners cannot provide the service regardless of their qualifications, the corresponding measures on residency requirements and the recognition of foreign qualifications are also scored as restrictive.

VII. Weighting

Aggregating individual restrictions into the STRI consists of two steps. The first step involves assigning weights to the policy measures. The second step involves aggregation into the overall STRI. A number of weighting schemes have been explored. Equal weights are the most common weighting scheme applied for constructing composite indicators. It is a transparent way of creating an index in the absence of any clear alternative. Lack of clear alternatives could be due to insufficient knowledge of causal relationships, absence of an empirical basis for deciding which is more important, or lack of clarity of what the index is supposed to measure. Equal weights are, however, not as free of judgement as is often claimed. With equal weights, the relative importance of each measure depends on how many measures are included and how individual restrictions are organised into sub-indicators, leaving rather a lot to subjective judgement or arbitrariness.

For trade restrictiveness indices, the measures should be weighted according to their contribution to trade costs, which in turn consist of entry costs and operational costs.¹¹ Services trade data are, however, not sufficiently detailed for estimating the trade cost equivalent of trade barriers and behind the border regulation that affects services trade. Nevertheless, there is a growing literature on measuring trade costs on the basis of observed trade patterns in services, but usually at a higher level of aggregation than what is required for the STRI (Miroudot et al., 2012). Furthermore, the different approaches to measuring trade costs on the basis of observed trade flows have strengths and weaknesses (Nordås, 2011) and as of yet a widely accepted methodology is not available.

Being constrained by lack of data, alternative ways of weighting the measures in a way that reflects contribution to trade costs have to be sought. Asking those directly and indirectly involved in services trade is one option. Such expert judgement has the advantage that relative importance can be captured in a realistic and meaningful way. One objection to using expert judgement is subjectivity. As argued above this objection also applies to other methodologies and the problem can be reduced, for instance, by asking a large group of experts.

The weighting scheme used for the calculation of the STRI relies on expert judgment. A large number of experts were asked to allocate 100 points among the five policy areas presented above. These are translated into weights by assigning the points experts allocated to the policy area to each measure that falls under it and correct for differences in the number of measures under the policy areas. Such differences are not arbitrary, but reflect the relative importance of the policy category for each sector. The formula for measure j under category i is the following: $w_{ji} = score_j w_i / \sum_i n_i w_i$ where n_i is the number of measures under category i and w_i is the share of the total number of points allocated to policy area i by the experts. The weights allocated to each policy area by the experts are depicted in Table 4.

11. For trade in goods estimating the contribution of tariffs and non-tariff barriers is straight forward. The International Monetary Fund's Overall Trade Restrictiveness Index (OTRI), for instances makes such estimates by the tariff line.

Table 4. Expert judgement weights by policy area and sector

Sector	Restrictions on foreign entry	Restrictions to movement of people	Other discriminatory measures	Barriers to competition	Regulatory transparency
Broadcasting	39.67	12.00	17.33	17.67	13.33
Motion	27.24	21.84	19.24	13.44	18.24
Sound	12.00	17.00	23.00	27.00	21.00
Construction	21.97	16.87	22.07	18.57	20.53
Courier	27.20	12.20	19.20	21.00	20.40
Computer	17.44	20.84	17.73	20.23	23.76
Distribution	30.11	10.28	17.67	21.94	20.00
Commercial banking	26.27	12.13	18.67	20.83	22.10
Insurance	31.00	13.80	16.00	19.13	20.07
Accounting	24.97	22.26	15.72	17.11	19.93
Architecture	18.61	25.62	17.11	16.49	22.17
Engineering	19.47	26.58	15.58	15.55	22.82
Legal	22.28	29.76	15.90	14.41	17.66
Telecommunications	24.89	13.07	15.44	26.31	20.29
Air transport	24.50	14.00	23.75	20.00	17.75
Maritime transport	35.00	25.00	12.50	14.50	13.00
Rail transport	24.89	13.07	15.44	26.31	20.29
Road transport	35.00	15.00	25.00	20.00	5.00

Assigning a unique weight to each measure gives the flexibility to break the STRIs down in several ways. One is according to the five policy areas described above. The STRIs are also presented with alternative classifications of measures that are of interest to policy makers. Distinguishing between measures that affect market access or national treatment versus domestic regulation is useful since the former are included in most services trade agreements, while the latter to a lesser extent. The STRIs are also presented according to which mode of supply the restriction applies; whether the measure applies to the establishment of a services supplier or to ongoing operations; and finally whether or not the measure is discriminatory. The measures and the classification of measures are presented in Annex C.

VIII. Concluding remarks

The scoring and weighting system presented in this note is used for transforming the qualitative information in the STRI regulatory database into quantitative indices. The methodology is relatively simple in order to ensure transparency, while also considering the fact that measures are linked in logical ways which must be taken into account to yield reasonable results. In particular, the scoring and weighting system must capture the restrictiveness of countries that may have few behind the border discriminatory regulations because they have high barriers to entry in the first place. Furthermore, if such a country opens up to international trade by lowering entry barriers, but introduces new behind the border measures in order to manage the transition to more open markets, this should be reflected by a lower STRI index value.

The STRI is a project under continuous development and refinements and updates will be made as needed.

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Annex A. Thresholds

The four quantitative measures presented here are displayed under the fifth policy area “Regulatory transparency and administrative requirements”

- Range of visa processing time (days)

This measure captures the ease of business travel, which may be an important complement to cross-border supply and commercial presence in services sectors. The information entailed in this measure is the number of days it takes on average to process a visa application for business visitors. The number of days may depend on the country of the applicant. India is an important non-OECD exporter of services and most countries in the OECD require a visa for Indian business travellers. To make the measure as comparable as possible across countries, information on the average number of visa processing days has been obtained from the concerned country’s embassy website in India, in addition to two OECD countries, Australia and Japan. For Australia and Japan the United States has been chosen as the third country. The visa processing time is calculated as the simple average of these three countries. If services providers are subject to special treatment, this is reported otherwise it is a horizontal measure. The value of **10 working days (2 weeks)** has been chosen as a reasonable limit beyond which the administrative process would impact negatively the activity of the services provider requesting a short-term business visit visa.

World Bank Doing Business Indicators on *Starting a business and Dealing with construction permits (2004-11)*

The following six measures (three horizontal for Computer, Professional services and Telecommunications plus three sector-specific for Construction services) address efficiency in implementation of regulation. The measures are taken directly from the World Bank Doing Business database. The methodology that the World Bank uses is described in documents on its website (www.doingbusiness.org). In brief, the methodology is based on creating standard cases (for instance the size, legal form, location and nature of business for a company) and collecting the relevant information from laws and regulation or business surveys in each country. The standardisation ensures that data are comparable across countries.

The 25 percentile threshold is calculated for the average value of time, cost and number of procedures on a population of 183 countries between 2004 and 2011, and represents the most efficient 45 countries in the Doing Business Indicators ranking. The level calculated in this way, and depicted in the tables below, will be maintained as a fixed threshold such that the score on this measure is independent of the sample and comparable over time.

Measure *.5.5.1 Time to complete all official procedures required to register a company (in calendar days)

Observations	Percentile	Threshold	[95% Confidence Interval]	
183	5	7.9	5.5	10.0
	25	20.0	16.3	23.3
	30	22.8	18.5	25.6
	50	30.9	28.0	34.2
	75	49.5	41.4	56.3
	95	127.0	86.9	149.0

**Measure *.5.6.1 Total cost to complete all official procedures required to register a company
(collected in USD, threshold calculated using cost as % of income per capita)**

Observations	Percentile	Threshold	[95% Confidence Interval]	
183	5	0.9	0.7	2.6
	25	8.6	6.4	10.0
	30	9.5	7.6	12.4
	50	22.1	15.8	28.9
	75	74.9	54.5	100.0
	95	281.3	197.0	501.2

Note: GDP per capita is measured in current US dollars.

Measure *.5.7.1 Number of official procedures required to register a company

Observations	Percentile	Threshold	[95% Confidence Interval]	
183	5	4.3	3.0	5.0
	25	6.9	6.0	7.2
	30	7.1	6.7	7.8
	50	8.8	8.0	9.3
	75	10.8	10.0	11.5
	95	14.8	13.0	16.7

Measure CO.5.5.1 Construction permit: time to complete all the procedures necessary to build a warehouse, including obtaining necessary licenses and permits, completing required notifications (days)

Observations	Percentile	Threshold	[95% Confidence Interval]	
182	5	66.0	52.0	76.5
	25	138.0	123.1	155.0
	30	153.7	133.8	165.8
	50	196.8	181.0	211.8
	75	248.9	232.3	267.5
	95	480.9	370.5	668.0

Measure CO.5.6.1 Construction permit: official costs associated with completing the procedures necessary to build a warehouse, including obtaining necessary licenses and permits, completing required notifications and inspections, and obtaining utility connections (collected in USD, threshold calculated using cost as % of income per capita)

Observations	Percentile	Threshold	[95% Confidence Interval]	
182	5	11.3	6.1	19.3
	25	57.6	44.5	92.2
	30	77.1	53.9	115.0
	50	206.1	143.2	290.2
	75	690.0	556.7	935.3
	95	2944.2	2039.0	10311.6

Note: Income per capita is measured as GDP per capita in current US dollars

Measure CO.5.7.1 Construction permit: all procedures that are necessary to build a warehouse, including obtaining necessary licenses and permits, completing required notifications and inspections, and obtaining utility connections

Observations	Percentile	Threshold	[95% Confidence Interval]	
182	5	10.0	8.2	11.0
	25	14.0	13.0	14.0
	30	14.0	13.9	15.0
	50	17.0	16.3	18.0
	75	21.2	20.0	23.9
	95	32.0	29.2	37.0

Annex B. Federal states

In federal states some of the regulations recorded by the measures included in the STRI database are under the jurisdiction of states, provinces or regions (hereafter referred to as states). Furthermore, the sub-federal level may have regulatory autonomy and regulation may therefore differ between states. In such cases one representative state has been selected.¹² The selection criteria for choosing the representative state are the following:

1. Harmonization with other OECD indicators which rely on one representative state. The first version of the STRI indices was based on an extended Product Market Regulation (PMR) survey, and the STRI was consequently based on regulation from the same state as the PMR. For the sake of OECD internal consistency, this principle has been retained in the new methodology.
2. For federal states where sub-national regulation was not relevant for the PMR (due to the sectors and regulations covered), states have been selected for the STRI on the basis of economic importance:
 - a. Largest population and largest output – or the state with the capital city or the largest city.
 - b. Close to national average as far as industrial structure and regulation are concerned.

Table B.1. Representative state in federal states

Country	Representative state
Australia	New South Wales
Brazil	Sao Paulo
Canada	Ontario
China	Beijing
Germany	Bavaria
India	Delhi
Russia	Moscow
Switzerland	Zürich
United States	New York

12. Another option would be to use the weighted average of all states. This is, however, not practically feasible, given the resources available to the STRI project.

Annex C. List of measures by sector

Table C.1. Measures included in the STRI for audio-visual services

Motion pictures

Measure	Establishment/ Operations
<i>Limitations on foreign entry</i>	
Foreign equity limitations: maximum foreign equity share allowed (%) (production and distribution)	E
Non-residents are allowed to invest in local film production and distribution through minority shares in local investment companies. Maximum foreign ownership in local investment companies (%).	E
There are statutory or other legal limits to the number or proportion of shares that can be acquired by foreign investors in firms that are controlled by national state or provincial governments	E
Legal form: only joint ventures are allowed	E
Legal form: other limitations	E
The number of firms permitted to practice is restricted by quotas	E
Board of directors: majority must be nationals	O
Board of directors: majority must be residents	O
Board of directors: at least one must be national	O
Board of directors: at least one must be resident	O
Manager must be national	O
Manager must be resident	O
Screening: foreign investors must show net economic benefits	E
Screening: approval unless contrary to national interest	E
Screening: notification	E
Limitations on the type of shares or bonds held by foreign investors	E
Conditions on subsequent transfer of capital and investments	E
Limitations on cross-border mergers and acquisitions	E
Broadcast or airtime quotas are in place for motion pictures	E
Screen quotas are in place	E
Import duties on film	E
Limitations on film renting	E
Limitations on downloading and streaming affecting cross-border trade	E
Other limitations	
<i>Limitations on movement of people</i>	
Quotas: intra-corporate transferees	O
Quotas: contractual services suppliers	E
Quotas: independent services suppliers	E
Labour market tests: intra-corporate transferees	O
Labour market tests: contractual services suppliers	E
Labour market tests: independent services suppliers	E

Measure	Establishment/ Operations
Limitation on duration of stay for intra-corporate transferees (months):	O
Limitation on duration of stay for contractual services suppliers is limited to (months):	E
Limitations on duration of stay for independent services suppliers is limited to (months):	E
There are measures facilitating the temporary entry of artists, crew and cast	E
Other limitations	
Other discriminatory measures	
Foreign suppliers are treated less favourably regarding taxes	O
Foreign suppliers are treated less favourably regarding eligibility to subsidies	O
There are limitations on foreign participation in public procurement	O
Dubbing is regulated	O
Local content: replication requirements	O
Local content: obligations to perform dubbing and/or subtitling locally	O
Local content: limitations on cast and crew	O
International standards on protection of artistic work apply	O
Royalties and license fees collected are distributed in an equitable and non-discriminatory manner	O
Discriminatory censorship fees and procedures	O
Other limitations	
Barriers to competition	
When appeal procedures are available in domestic regulatory systems, they are open to affected or interested foreign parties as well.	O
Foreign firms have redress when business practices are perceived to restrict competition in a given market	O
Publicly-controlled firms or undertakings are subject to an exclusion or exemption, either complete or partial, from the application of the general competition law.	E
National, state or provincial government control at least one major firm in the sector	E
Advertising limitations	O
Vertical integration is monitored and regulated	O
Other limitations	
Regulatory transparency	
Regulations are published or otherwise communicated to the public prior to entry into force	O
There is a public comment procedures open to interested persons	O
Range of visa processing time (days)	O
Time to complete all official procedures required to register a company (in calendar days)	E
Total cost to complete all official procedures required to register a company (in % of income per capita)	E
Number of official procedures required to register a company	E
Intellectual property rights are enforced	O
Other limitations	

Broadcasting

Measure	Establishment/ Operations
<i>Limitations on foreign entry</i>	
Foreign equity limitations: maximum foreign equity share allowed for broadcast and media outlets (%)	E
Foreign equity limitations: maximum foreign equity share allowed for terrestrial television broadcasters (%)	E
There are statutory or other legal limits to the number or proportion of shares that can be acquired by foreign investors in firms that are controlled by national state or provincial governments	E
Legal form: only joint ventures are allowed	E
Broadcast or airtime quotas are in place for motion pictures	E
Broadcast time is regulated by quotas	E
The number of foreign channels is limited by quotas	E
Board of directors: majority must be nationals	O
Board of directors: majority must be residents	O
Board of directors: at least one must be national	O
Board of directors: at least one must be resident	O
Manager must be national	O
Manager must be resident	O
Foreign channels are subject to economic needs test	E
There are residency requirements for TV producers	E
Screening: foreign investors must show net economic benefits	E
Screening: approval unless contrary to national interest	E
Screening: notification	E
Limitations on the type of shares or bonds held by foreign investors	E
Conditions on subsequent transfer of capital and investments	E
Limitations on cross-border mergers and acquisitions	E
Limitations on downloading and streaming affecting cross-border trade	E
Other limitations	
<i>Limitations to the movement of people</i>	
Quotas: intra-corporate transferees	O
Quotas: contractual services suppliers	E
Quotas: independent services suppliers	E
Labour market tests: intra-corporate transferees	O
Labour market tests: contractual services suppliers	E
Labour market tests: independent services suppliers	E
Limitation on duration of stay for intra-corporate transferees (months):	O
Limitation on duration of stay for contractual services suppliers is limited to (months):	E
Limitations on duration of stay for independent services suppliers is limited to (months):	E
There are measures facilitating the temporary entry of artists, cast and crew	E
Other limitations	
<i>Other discriminatory measures</i>	
TV channels receive discriminatory subsidies or tax breaks	O
There are discriminatory subsidies or tax breaks for the production of programmes	O
Subsidies and tax breaks for audio-visual work are subject to cultural tests	O

Measure	Establishment/ Operations
There are limitations on foreign participation in public procurement	O
Dubbing is regulated	O
Compulsory local processing, dubbing and sub-titling	O
Foreign program producers have to recruit part of the cast and crew among local professionals	O
International standards on protection of artistic work apply	O
Other limitations	
Barriers to competition	
When appeal procedures are available in domestic regulatory systems, they are open to affected or interested foreign parties as well.	O
Foreign firms have redress when business practices are perceived to restrict competition in a given market	O
Foreign suppliers can appeal the decisions of the audio-visual regulatory authority	O
Foreign suppliers have redress when business practices are perceived to restrict competition in a given market	O
National, state or provincial government controls at least one major TV channel	E
Publicly-controlled firms or undertakings are subject to an exclusion or exemption, either complete or partial, from the application of the general competition law.	E
Minimum capital requirements	E
Public TV channels are subject to rules that affect the competition with private broadcasters	O
Vertical integration is monitored and regulated	O
Other limitations	
Memo: There is at least one dominant broadcaster	
Regulatory transparency	
Broadcasting licenses are granted in a transparent manner	E
Regulations are published or otherwise communicated to the public prior to entry into force	O
There is a public comment procedure open to interested persons, including foreign suppliers	O
Range of visa processing time (days)	O
Time to complete all official procedures required to register a company (in calendar days)	E
Total cost to complete all official procedures required to register a company (in % of income per capita)	E
Number of official procedures required to register a company	E
Intellectual property rights are enforced	O
Other limitations	

Sound recording

Measure	Establishment/ Operations
Limitations on foreign entry	
Foreign equity limitations: maximum foreign equity share allowed (%)	E
Non-residents are allowed to invest in local sound recording through minority shares in local investment companies. Maximum foreign ownership in local investment companies (%).	E
There are statutory or other legal limits to the number or proportion of shares that can be acquired by foreign investors in firms that are controlled by national state or provincial governments	E
Legal form: only joint ventures are allowed	E
Legal form: other limitations	E
The number of firms permitted to practice is restricted by quotas	E
Board of directors: majority must be nationals	O
Board of directors: majority must be residents	O
Board of directors: at least one must be national	O
Board of directors: at least one must be resident	O
Manager must be national	O
Manager must be resident	O
Screening: foreign investors must show net economic benefits	E
Screening: approval unless contrary to national interest	E
Screening: notification	E
Limitations on the type of shares or bonds held by foreign investors	E
Conditions on subsequent transfer of capital and investments	E
Limitations on cross-border mergers and acquisitions	E
Quotas: A proportion of television or radio broadcast time is reserved to domestic music	E
There is a statutory monopoly on copyrights management	E
Limitations on downloading and streaming affecting cross-border trade	E
Other limitations	
Limitations on movement of people	
Quotas: intra-corporate transferees	O
Quotas: contractual services suppliers	E
Quotas: independent services suppliers	E
Labour market tests: intra-corporate transferees	O
Labour market tests: contractual services suppliers	E
Labour market tests: independent services suppliers	E
Limitation on duration of stay for intra-corporate transferees (months):	O
Limitation on duration of stay for contractual services suppliers is limited to (months):	E
Limitations on duration of stay for independent services suppliers is limited to (months):	E
There are measures facilitating the temporary entry of artists, crew and cast	
Other limitations	
Other discriminatory measures	
Foreign suppliers are treated less favourably regarding taxes	O
Foreign suppliers are treated less favourably regarding eligibility to subsidies	O
There are limitations on foreign participation in public procurement	O

Measure	Establishment/ Operations
Local content: subsidies for film or television program making are conditioned on local content requirements for music	O
Local content: Limitations on cast and crew	O
International standards on protection of artistic work apply	O
Foreign rights holders are allowed to join a local copyrights management body	O
Royalties collected are distributed in an equitable and non-discriminatory manner	O
Other limitations	
Barriers to competition	
When appeal procedures are available in domestic regulatory systems, they are open to affected or interested foreign parties as well	O
Foreign firms have redress when business practices are perceived to restrict competition in a given market	O
Publicly-controlled firms or undertakings are subject to an exclusion or exemption, either complete or partial, from the application of the general competition law.	E
National, state or provincial government control at least one major firm in the sector	E
Minimum capital requirements	E
Arbitration structures are in place to deal with commercial disagreement between users of rights and collective rights managers	O
Vertical agreements: territorial or customer group sales restrictions are subject to regulation	O
Anti-competitive behaviour such as cartels are prohibited	O
Other limitations	
Regulatory transparency	
Regulations are published or otherwise communicated to the public prior to entry into force	O
There is a public comment procedures open to interested persons	O
Range of visa processing time (days)	O
Time to complete all official procedures required to register a company (in calendar days)	E
Total cost to complete all official procedures required to register a company (in % of income per capita)	E
Number of official procedures required to register a company	E
Intellectual property rights are enforced	O
Other limitations	

Table C.2. Measures included in the STRI for computer services

Measure	MA&NT/ Domestic reg./other	Mode	Establishment/ Operations	Discr./ Non- discr.
Restrictions on foreign entry				
Foreign equity restrictions: maximum foreign equity share allowed (%)	MA&NT	3	E	D
Non-residents are allowed to invest in local computer services firm through minority shares in local investment companies. Maximum foreign ownership in local investment companies (%)	MA&NT	3	E	D
There are statutory or other legal limits to the number or proportion of shares that can be acquired by foreign investors in firms that are controlled by national state or provincial governments	MA&NT	3	E	D
Legal form: only joint ventures are allowed	MA&NT	3	E	D
The number of firms permitted to practice is restricted by quotas	MA&NT	3	E	D
Board of directors: majority must be nationals	MA&NT	3	O	D
Board of directors: majority must be residents	MA&NT	3	O	D
Board of directors: at least one must be national	MA&NT	3	O	D
Board of directors: at least one must be resident	MA&NT	3	O	D
Manager must be national	MA&NT	3	O	D
Manager must be resident	MA&NT	3	O	D
Screening: foreign investors must show net economic benefits	MA&NT	3	O	D
Screening: approval unless contrary to national interest	MA&NT	3	E	D
Screening: notification	MA&NT	3	E	D
Restrictions on the type of shares or bonds held by foreign investors	MA&NT	3	E	D
Conditions on subsequent transfer of capital and investments	MA&NT	3	E	D
Restrictions on cross-border mergers and acquisitions	MA&NT	3	E	D
Other restrictions				
Restrictions on the movement of people				
Quotas: intra-corporate transferees	MA&NT	4	O	D
Quotas: contractual services suppliers	MA&NT	4	E	D
Quotas: independent services suppliers	MA&NT	4	E	D
Labour market tests: intra-corporate transferees	MA&NT	4	O	D
Labour market tests: contractual services suppliers	MA&NT	4	E	D
Labour market tests: independent services suppliers	MA&NT	4	E	D
Limitation on duration of stay for intra-corporate transferees (months):	MA&NT	4	O	D
Limitation on duration of stay for contractual services suppliers is limited to (months):	MA&NT	4	E	D
Limitation on duration of stay for independent services suppliers is limited to (months):	MA&NT	4	E	D
Other discriminatory measures				
Foreign suppliers are treated less favourably regarding taxes and eligibility to subsidies	MA&NT	All	O	D
Foreign participation in public procurement: discrimination in the application of financial or technical criteria for project tender	Other	All	O	D
Foreign participation in public procurement: restrictions on government offshoring of computer services	Other	All	O	D

Measure	MA&NT/ Domestic reg./other	Mode	Establishment/ Operations	Discr./ Non- discr.
There is a formal requirement that regulators consider comparable international standards and rules before setting new domestic standards	DR	All	O	ND
Barriers to competition				
When appeal procedures are available in domestic regulatory systems, they are open to affected or interested foreign parties as well.	MA&NT	3	O	D
Foreign firms have redress when business practices are perceived to restrict competition in a given market	MA&NT	3	O	D
National, state or provincial government control at least one major firm in the sector	Other	3	E	ND
Publicly-controlled firms or undertakings are subject to an exclusion or exemption, either complete or partial, from the application of the general competition law	Other	3	E	ND
Minimum capital requirement	Other	3	E	ND
Regulatory transparency				
Regulations are published or otherwise communicated to the public prior to entry into force	Other	All	O	ND
There is a public comment procedure open to interested persons, and/or the regulator has a formal mechanism for consultation with stakeholders, including foreign suppliers	Other	All	O	ND
Range of visa processing time (days)	Other	4	O	ND
Time to complete all official procedures required to register a company (in calendar days)	Other	3	O	ND
Total cost to complete all official procedures required to register a company (in USD)	Other	3	O	ND
Number of official procedures required to register a company	Other	3	O	ND

Table C.3. Measures included in the STRI for construction services

Measures	MA&NT/ DR&Other	Mode	Establishment/ operations	Discr./ non- discr.
Restrictions on foreign entry				
Foreign equity restrictions: maximum foreign equity share allowed (%)	MA&NT	3	E	D
There are statutory or other legal limits to the number or proportion of shares that can be acquired by foreign investors in firms that are controlled by national, state or provincial governments	MA&NT	3	E	D
Legal form: branches or representative offices are prohibited	MA&NT	3	E	D
Legal form: joint venture required	MA&NT	3	E	D
The number of construction firms is restricted by quotas	MA&NT	3	E	D
Board of directors: majority must be nationals	MA&NT	3	O	D
Board of directors: majority must be residents	MA&NT	3	O	D
Board of directors: at least one must be national	MA&NT	3	O	D
Board of directors: at least one must be resident	MA&NT	3	O	D
Manager must be national	MA&NT	3	O	D
Manager must be resident	MA&NT	3	O	D
Screening: foreign investors must show net economic benefits	MA&NT	3	E	D
Screening: approval unless contrary to national interest	MA&NT	3	E	D
Screening: notification	MA&NT	3	E	D
Acquisition of land and real estate by foreigners is prohibited	MA&NT	3	E	D
Acquisition of land and real estate by foreigners is subject to restrictions	MA&NT	3	E	D
Conditions on subsequent transfer of capital and investments	MA&NT	3	E	D
Local content of personnel and/or goods	MA&NT	3	O	D
Discriminatory qualification requirements for building permits to undertake construction work	MA&NT	3	E	D
Restrictions to movement of people				
Quotas: intra-corporate transferees	MA&NT	4	O	D
Quotas: contractual services suppliers	MA&NT	4	E	D
Quotas: independent services suppliers	MA&NT	4	E	D
Labour market tests: intra-corporate transferees	MA&NT	4	O	D
Labour market tests: contractual services suppliers	MA&NT	4	E	D
Labour market tests: independent services suppliers	MA&NT	4	E	D
Limitation on duration of stay for intra-corporate transferees (months):	MA&NT	4	O	D
Limitation on duration of stay for contractual services suppliers is limited to (months):	MA&NT	4	E	D
Limitation on duration of stay for independent services suppliers is limited to (months):	MA&NT	4	E	D
Nationality or citizenship required for construction engineers	MA&NT	All	O	D
Residency required for construction engineers	MA&NT	All	O	D
Recognition of foreign qualifications for construction engineers: laws or regulations establish a process for recognising higher education degrees in engineering gained abroad	DR&Other	All	O	ND

Measures	MA&NT/ DR&Other	Mode	Establishment/ operations	Discr./ non- discr.
Recognition of foreign qualifications for construction engineers: foreign engineers are required to undertake local examinations to qualify for membership of the profession	MA&NT	All	O	D
Recognition of foreign qualifications for construction engineers: foreign engineers are required to undertake at least 1 year of local practice to become a member of the profession	MA&NT	All	O	D
Other discriminatory measures				
Foreign suppliers are treated less favourably regarding taxes or eligibility to subsidies	MA&NT	All	O	D
Foreign participation in public procurement: explicit access discrimination in favour of local firms	DR&Other	All	O	D
Foreign participation in public procurement: domestic content of personnel and/or goods	DR&Other	All	O	D
Foreign participation in public procurement: technical specifications affect the conditions of competition in favour of local providers	DR&Other	All	O	D
Foreign participation in public procurement: discriminatory qualification processes and procedures	DR&Other	All	O	D
Foreign participation in public procurement: contract award on the basis of non-objective/discriminatory criteria	DR&Other	All	O	D
Foreign participation in public procurement: procurement laws, regulations and procedures are transparent	DR&Other	All	O	D
Foreign participation in public procurement: foreign suppliers are provided the opportunity to challenge the consistency of the conduct of a procurement with the laws and regulations	DR&Other	All	O	D
Laws or regulations encourage or require the use of international standards: building design code standards	DR&Other	All	O	ND
Laws or regulations encourage or require the use of international standards: construction product standards	DR&Other	All	O	ND
Barriers to competition				
When appeal procedures are available in domestic regulatory systems, they are open to affected or interested foreign parties as well	MA&NT	3	O	D
Foreign firms have redress when business practices are perceived to restrict competition in a given market	MA&NT	3	O	D
National, state or provincial government control at least one major firm in the sector	DR&Other	3	E	ND
Publicly-controlled firms or undertakings are subject to an exclusion or exemption from the application of the general competition law	DR&Other	3	E	ND
Minimum capital requirement	DR&Other	3	E	ND
Regulatory transparency				
Regulations are published or otherwise communicated to the public prior to entry into force	DR&Other	All	O	ND
There is a public comment procedure open to interested persons, and/or the regulator has a formal mechanism for consultation with stakeholders, including foreign suppliers	DR&Other	All	O	ND
Range of visa processing time (days)	DR&Other	All	O	ND
Construction permit: time to complete all the procedures necessary to build a warehouse, including obtaining necessary licenses and permits, completing required notifications and inspections, and obtaining utility connections (in calendar days)	DR&Other	All	O	ND

Measures	MA&NT/ DR&Other	Mode	Establishment/ operations	Discr./ non- discr.
Construction permit: official costs associated with completing the procedures necessary to build a warehouse, including obtaining necessary licenses and permits, completing required notifications and inspections, and obtaining utility connectio	DR&Other	All	O	ND
Construction permit: all procedures that are necessary to build a warehouse, including obtaining necessary licenses and permits, completing required notifications and inspections, and obtaining utility connections	DR&Other	All	O	ND

Table C.4. Measures included in the STRI for distribution services

Measures	MA&NT/ DR&Other	Mode	Establishment/ operations	Discr./ non- discr.
Restrictions on foreign entry				
Maximum foreign equity share allowed (%) for retailers	MA&NT	3	E	D
Maximum foreign equity share allowed (%) for wholesalers	MA&NT	3	E	D
There are statutory or other legal limits to the number or proportion of shares that can be acquired by foreign investors in firms that are controlled by national state or provincial governments	MA&NT	3	E	D
Legal form: only joint ventures are allowed	MA&NT	3	E	D
Legal form: other restrictions	MA&NT	3	E	D
Board of directors: majority must be nationals	MA&NT	3	O	D
Board of directors: majority must be residents	MA&NT	3	O	D
Board of directors: at least one must be national	MA&NT	3	O	D
Board of directors: at least one must be resident	MA&NT	3	O	D
Manager must be national	MA&NT	3	O	D
Manager must be resident	MA&NT	3	O	D
Screening: foreign investors must show net economic benefits	MA&NT	3	E	D
Screening: approval unless contrary to national interest	MA&NT	3	E	D
Screening: notification	MA&NT	3	E	D
Conditions on subsequent transfer of capital and investments	MA&NT	3	E	D
Restrictions on cross-border mergers and acquisitions	MA&NT	3	E	D
Acquisition of land and real estate by foreigners is prohibited or subject to restrictions	MA&NT	3	E	D
The distribution of certain products at the retail level is reserved for statutory monopolies	MA&NT	3	E	ND
The distribution of certain products at the wholesale level is reserved for statutory monopolies	MA&NT	3	E	ND
Wholesale licences for the distribution of certain products are subject to quotas or economic needs tests	MA&NT	3	E	ND
Retail licences for the distribution of certain products are subject to quotas or economic needs tests	MA&NT	3	E	ND
Licences for department stores or large-store formats are subject to quotas or economic needs tests	MA&NT	3	E	ND
Zoning regulation discriminates foreign suppliers against domestic competitors	MA&NT	3	E	D
The number of sales outlets per firm is limited	MA&NT	3	E	ND
Commercial presence is required in order to provide distribution services.	MA&NT	All	E	D
A licence is required for e-commerce	MA&NT	All	E	ND
Restrictions on franchising	MA&NT	3	E	ND
Restrictions on direct selling	MA&NT	All	E	ND
Other restrictions	MA&NT	3	E	D
Restrictions on the movement of people				
Quotas: intra-corporate transferees	MA&NT	4	O	D

Measures	MA&NT/ DR&Other	Mode	Establishment/ operations	Discr./ non- discr.
Quotas: contractual services suppliers	MA&NT	4	E	D
Quotas: independent services suppliers	MA&NT	4	E	D
Labour market tests: intra-corporate transferees	MA&NT	4	O	D
Labour market tests: contractual services suppliers	MA&NT	4	E	D
Labour market tests: independent services suppliers	MA&NT	4	E	D
Limitation on duration of stay for intra-corporate transferees (months)	MA&NT	4	O	D
Limitation on duration of stay for contractual services suppliers is limited to (months)	MA&NT	4	E	D
Limitation on duration of stay for independent services suppliers is limited to (months)	MA&NT	4	E	D
Other restrictions	MA&NT	4	E	D
Other discriminatory measures and international standards				
Foreign suppliers are treated less favourably regarding taxes and eligibility to subsidies	MA&NT	All	O	D
Foreign participation in public procurement: discrimination in the application of financial or technical criteria for project tender	DR&Other	All	O	D
Do national standards for distribution services deviate from international standards ?	DR&Other	All	O	D
Foreign firms are discriminated against on trademark protection	MA&NT	All	O	D
Local sourcing requirements	MA&NT	3	O	D
The prepackaging of products is subject to mandatory nominal quantities	DR&Other	All	O	ND
Labelling provisions go beyond information requirements	DR&Other	All	O	ND
Consumer credit licences are available to foreign retailers	MA&NT	All	O	D
Other restrictions	MA&NT	All	O	D
Barriers to competition				
When appeal procedures are available in domestic regulatory systems, they are open to affected or interested foreign parties as well.	MA&NT	3	O	D
Foreign firms have redress when business practices are perceived to restrict competition in a given market	MA&NT	3	O	D
National, state or provincial government control at least one major firm in the sector	DR&Other	3	E	ND
Publicly-controlled firms or undertakings are subject to an exclusion or exemption, either complete or partial, from the application of the general competition law.	DR&Other	3	E	ND
Minimum capital requirements	DR&Other	3	E	ND
Vertical agreements: Resale price maintenance is subject to regulation	DR&Other	All	O	ND
Vertical agreements: Territorial or customer group sales restrictions are subject to regulation	DR&Other	All	O	ND
Laws or regulations impose restrictions on the nature or content of contracts	DR&Other	All	O	ND

Measures	MA&NT/ DR&Other	Mode	Establishment/ operations	Discr./ non- discr.
Firms are required to disclose confidential information	DR&Other	All	O	ND
Price regulation: minimum prices	DR&Other	All	O	ND
Large retailers are subject to specific taxes	DR&Other	3	O	ND
Seasonal sales periods are regulated	DR&Other	All	O	ND
Regulation imposes an upper limit on shop opening hours	DR&Other	3	O	ND
Regulations limit the range of products a retailer may carry	DR&Other	All	O	ND
Retailers or wholesalers are subject to restrictions on advertising	DR&Other	All	O	ND
Retailers can set up their own recycling systems	DR&Other	3	O	ND
Memo: Minimum floor space to be considered large format retail outlet (m ²)				
Other restrictions	DR&Other	All	O	ND
Regulatory transparency				
Regulations are published or otherwise communicated to the public prior to entry into force	DR&Other	All	O	ND
There is a public comment procedure open to interested persons, including foreign suppliers	DR&Other	All	O	ND
Range of visa processing time (days)	DR&Other	4	O	ND
Construction permit: time to complete all the procedures necessary to build a warehouse, including obtaining necessary licenses and permits, completing required notifications and inspections, and obtaining utility connections (in calendar days)	DR&Other	3	O	ND
Construction permit: official costs associated with completing the procedures necessary to build a warehouse, including obtaining necessary licenses and permits, completing required notifications and inspections, and obtaining utility connections (in %)	DR&Other	3	O	ND
Construction permit: all procedures that are necessary to build a warehouse, including obtaining necessary licenses and permits, completing required notifications and inspections, and obtaining utility connections	DR&Other	3	O	ND
Time taken between the submission of an accepted customs declaration and customs clearance (days)	DR&Other	All	O	ND
Licences are allocated according to publicly available criteria	DR&Other	3	O	ND
Restrictions related to the duration and renewal of licences	DR&Other	3	O	ND
Other restrictions	DR&Other	All	O	ND

Table C.5. Measures included in the STRI for financial services

Commercial banking

Measure	MA&NT / DR&Other	Mode	Establishment / Operations	Discr. / Non- discr.
<i>Restrictions on market entry</i>				
Maximum foreign equity share (%)	MA&NT	3	E	D
Statutory or legal limit on the shares that can be acquired by foreign investors in government controlled firms	MA&NT	3	E	D
Joint ventures required	MA&NT	3	E	D
Foreign subsidiaries are prohibited	MA&NT	3	E	D
Foreign branches are prohibited	MA&NT	3	E	D
Restrictions on foreign branches	MA&NT	3	E	D
Board of directors: majority must be nationals	MA&NT	3	O	D
Board of directors: majority must be residents	MA&NT	3	O	D
Board of directors: at least one must be national	MA&NT	3	O	D
Board of directors: at least one must be resident	MA&NT	3	O	D
Manager must be national	MA&NT	3	O	D
Manager must be resident	MA&NT	3	O	D
Screening: foreign investors must show net economic benefits	MA&NT	3	E	D
Screening: approval unless contrary to national interest	MA&NT	3	E	D
Screening: notification	MA&NT	3	E	D
Restrictions on the type of shares or bonds held by foreign investors	MA&NT	3	E	D
Conditions on subsequent transfer of capital and investments	MA&NT	3	E	D
Restrictions on cross-border mergers and acquisitions	MA&NT	3	E	D
Quotas or economic needs tests are applied in the allocation of licences	MA&NT	3	E	ND
Criteria to obtain a licence are more stringent for foreign companies	MA&NT	3	E	D
Acquisition of land and real estate by foreigners is restricted	MA&NT	3	E	D
Limits on the number of branches	MA&NT	3	E	ND
Only domestic banks can establish their own ATM networks	MA&NT	3	E	D
Limits on the number of ATMs per bank	MA&NT	3	E	ND
Each ATM is considered as a separate branch in the licensing and authorization process	MA&NT	3	E	ND
Some banking services are reserved for domestic suppliers	MA&NT	All	E	D
A commercial bank is prohibited from engaging in insurance activities	DR&Other	3	E	ND
A commercial bank is prohibited from engaging in securities activities	DR&Other	3	E	ND

Measure	MA&NT / DR&Other	Mode	Establishment / Operations	Discr. / Non- discr.
Some financial products are reserved for statutory monopolies	MA&NT	All	E	ND
Commercial presence required: Deposit-taking	MA&NT	1	E	D
Commercial presence required: Lending	MA&NT	1	E	D
Commercial presence required: Payment services	MA&NT	1	E	D
Limitations on cross-border transfers by customers	DR&Other	1	E	D
Restrictions on internet banking	DR&Other	All	E	ND
Other restrictions on foreign entry	MA&NT	3	E	D
<i>Restrictions to the movement of people</i>				
Quotas: intra-corporate transferees	MA&NT	4	O	D
Quotas: contractual services suppliers	MA&NT	4	E	D
Quotas: independent services suppliers	MA&NT	4	E	D
Labour market tests: intra-corporate transferees	MA&NT	4	O	D
Labour market tests: contractual services suppliers	MA&NT	4	E	D
Labour market tests: independent services suppliers	MA&NT	4	E	D
Limitation on stay for intra-corporate transferees (months)	MA&NT	4	O	D
Limitation on stay for contractual services suppliers (months)	MA&NT	4	E	D
Limitation on stay for independent services suppliers (months)	MA&NT	4	E	D
Other restrictions to movement of people	MA&NT	4	E	D
<i>Other discriminatory measures</i>				
Foreign suppliers treated less favourably regarding taxes and eligibility for subsidies	MA&NT	3	O	D
There are limitations on foreign participation in public procurement	DR&Other	All	O	D
Restrictions on extending loans or taking deposits in foreign currency	DR&Other	All	O	ND
Restrictions on lending to non-residents for domestically licensed banks	DR&Other	3	O	ND
Restrictions on raising capital domestically for foreign banks	MA&NT	3	O	D
Discrimination in the access of foreign-owned banks to the central bank discount window	MA&NT	3	O	D
Subsidiaries of foreign banks are covered by the deposit insurance scheme equally to domestic banks	MA&NT	3	O	D
Non-discriminatory access to wholesale payment systems	MA&NT	3	O	D
Non-discriminatory access to retail payment systems	MA&NT	3	O	D
Non-discriminatory access to clearing houses	MA&NT	3	O	D
Deviation from international standards: Basel standards	DR&Other	All	O	ND
Deviation from international standards: Accounting rules	DR&Other	All	O	ND
Deviation from international standards: Transparency and AML/CFT rules	DR&Other	All	O	ND

Measure	MA&NT / DR&Other	Mode	Establishment / Operations	Discr. / Non- discr.
Other restrictions in other discriminatory measures	MA&NT	3	O	D
Barriers to competition				
Available appeal procedures in domestic regulatory systems are also open to affected foreign parties	MA&NT	3	O	D
Foreign firms have redress when business practices are perceived to restrict competition	MA&NT	3	O	D
The government controls at least one major firm in the sector	DR&Other	3	E	ND
Publicly-controlled firms are subject to an exclusion or exemption from the general competition law	DR&Other	3	E	ND
Regulated contractual interest rates (loans)	DR&Other	All	O	ND
Ceiling on default interest rates (loans)	DR&Other	All	O	ND
Maximum loan value	DR&Other	All	O	ND
Regulated interest rates (deposits)	DR&Other	All	O	ND
Regulated banking fees	DR&Other	All	O	ND
Approval by the regulatory authority required for new products or services	DR&Other	All	O	ND
Approval by the regulatory authority required for new rates and fees	DR&Other	All	O	ND
Directed credit schemes	DR&Other	3	O	ND
Early repayment conditions and fees are subject to regulation	DR&Other	All	O	ND
Product tying is regulated	DR&Other	All	O	ND
Existence of a collateral registry and access of all lending institutions to collateral information	DR&Other	All	O	ND
Advertising is either prohibited or subject to restrictions	DR&Other	All	O	ND
The supervisor has full authority over licensing and the enforcement of prudential measures	DR&Other	All	O	ND
Length of term of heads of the supervisory authority	DR&Other	All	O	ND
The government can overrule the decisions of the supervisor	DR&Other	All	O	ND
The government has discretionary control over funding of the supervisory agency	DR&Other	All	O	ND
Other restrictions in barriers to competition	DR&Other	All	O	ND
Regulatory transparency				
Regulations are communicated to the public prior to entry into force	DR&Other	All	O	ND
Public comment procedure open to interested persons, including foreign suppliers	DR&Other	All	O	ND
Range of visa processing time (business days)	DR&Other	4	O	ND
Time to complete all official procedures to register a company (days)	DR&Other	3	O	ND
Cost to complete all official procedures for registering a company (% of income per capita)	DR&Other	3	O	ND

Measure	MA&NT / DR&Other	Mode	Establishment / Operations	Discr. / Non- discr.
Number of official procedures for registering a company	DR&Other	3	O	ND
Licences are allocated according to publicly available criteria	DR&Other	3	E	ND
There is a maximum time allowed to the regulator for decisions on applications	DR&Other	3	E	ND
Time of resolving insolvency (in years)	DR&Other	All	O	ND
Cost of resolving insolvency (in % of the estate's value)	DR&Other	All	O	ND
Other restrictions in regulatory transparency	DR&Other	All	O	ND

Insurance services

Measure	MA&NT / DR&Other	Mode	Establishment / Operations	Discr. / Non-discr.
Restrictions on market entry				
Maximum foreign equity share (%): life, non-life, reinsurance, brokerage	MA&NT	3	E	D
Statutory or legal limit on the shares that can be acquired by foreign investors in government controlled firms: life, non-life, reinsurance	MA&NT	3	E	D
Joint ventures required: life, non-life, reinsurance	MA&NT	3	E	D
Restrictions on foreign subsidiaries: life, non-life, reinsurance	MA&NT	3	E	D
Foreign branches are prohibited: life, non-life, reinsurance	MA&NT	3	E	D
Restrictions on foreign branches: life, non-life, reinsurance	MA&NT	3	E	D
Board of directors: majority must be nationals: life, non-life, reinsurance	MA&NT	3	O	D
Board of directors: majority must be residents: life, non-life, reinsurance	MA&NT	3	O	D
Board of directors: at least one must be national: life, non-life, reinsurance	MA&NT	3	O	D
Board of directors: at least one must be resident: life, non-life, reinsurance	MA&NT	3	O	D
Manager must be national: life, non-life, reinsurance	MA&NT	3	O	D
Manager must be resident: life, non-life, reinsurance	MA&NT	3	O	D
Screening: foreign investors must show net economic benefits: life, non-life, reinsurance	MA&NT	3	E	D
Screening: approval unless contrary to national interest: life, non-life, reinsurance	MA&NT	3	E	D
Screening: notification: life, non-life, reinsurance	MA&NT	3	E	D
Restrictions on the type of shares or bonds held by foreign investors: life, non-life, reinsurance	MA&NT	3	E	D
Conditions on subsequent transfer of capital and investments: life, non-life, reinsurance	MA&NT	3	E	D
Restrictions on cross-border mergers and acquisitions: life, non-life, reinsurance	MA&NT	3	E	D
Quotas or economic needs tests are applied in the allocation of licences: life, non-life, reinsurance	MA&NT	3	E	ND
Period of time since an applicant's incorporation in its home country before obtaining a licence: life, non-life, reinsurance	MA&NT	3	E	D
Criteria to obtain a licence are more stringent for foreign companies: life, non-life, reinsurance	MA&NT	3	E	D
An insurance company is prohibited from engaging in banking activities	DR&Other	3	E	ND
An insurance company is prohibited from engaging in securities activities	DR&Other	3	E	ND

Measure	MA&NT / DR&Other	Mode	Establishment / Operations	Discr. / Non-discr.
Some insurance activities are reserved for statutory monopolies	MA&NT	All	E	ND
Some insurance activities are reserved for domestic suppliers	MA&NT	All	E	D
Commercial presence required: life insurance, personal property and casualty insurance, commercial insurance, MAT, reinsurance	MA&NT	1	E	D
Exception to commercial presence requirement for domestically unavailable insurance: non-life, MAT, reinsurance	MA&NT	1	E	D
Resident intermediary required for cross-border supply: life, non-life, MAT, reinsurance	MA&NT	1	E	D
Other restrictions on foreign entry	MA&NT	3	E	D
Restrictions to the movement of people				
Quotas: intra-corporate transferees	MA&NT	4	O	D
Quotas: contractual services suppliers	MA&NT	4	E	D
Quotas: independent services suppliers	MA&NT	4	E	D
Labour market tests: intra-corporate transferees	MA&NT	4	O	D
Labour market tests: contractual services suppliers	MA&NT	4	E	D
Labour market tests: independent services suppliers	MA&NT	4	E	D
Limitation on stay for intra-corporate transferees (months)	MA&NT	4	O	D
Limitation on stay for contractual services suppliers (months)	MA&NT	4	E	D
Limitation on stay for independent services suppliers (months)	MA&NT	4	E	D
Agents and brokers: Nationality or citizenship is required to practice	MA&NT	All	E	D
Agents and brokers: Prior or permanent residency is required to practice	MA&NT	All	E	D
Agents and brokers: A local degree is required to practice	MA&NT	All	E	D
Agents and brokers: A local examination is required to practice	MA&NT	All	E	D
Agents and brokers: At least one year of local professional experience in the sector is required to practice	MA&NT	All	E	D
Actuaries: Membership in the professional association is closed to foreigners	MA&NT	All	E	D
Actuaries: A local examination is required to practice	MA&NT	All	E	D
Actuaries: Absence of a process for the recognition of foreign higher education degrees	MA&NT	All	E	D
Actuaries: At least one year of local professional experience in the sector is required to practice	MA&NT	All	E	D
Appointed actuaries must be nationals or residents	MA&NT	All	E	D
Other restrictions to movement of people	MA&NT	4	E	D

Measure	MA&NT / DR&Other	Mode	Establishment / Operations	Discr. / Non-discr.
<i>Other discriminatory measures</i>				
Foreign suppliers treated less favourably regarding taxes and eligibility to subsidies: life, non-life, reinsurance	MA&NT	3	O	D
There are limitations on foreign participation in public procurement	DR&Other	All	O	D
Restrictions on writing insurance contracts in foreign currency	DR&Other	All	O	ND
Deviation from international standards: Transparency and AML/CFT rules	DR&Other	All	O	ND
Deviation from international standards: Accounting rules	DR&Other	All	O	ND
Mandatory cessions by foreign-owned insurers to domestic reinsurers: life, non-life	MA&NT	3	O	D
Limits on the share of risks that can be ceded to foreign reinsurers: life, non-life	MA&NT	All	O	D
Discriminatory financial requirements for foreign reinsurers: life, non-life	MA&NT	1	O	D
Other restrictions in other discriminatory measures	MA&NT	3	O	D
<i>Barriers to competition</i>				
Available appeal procedures in domestic regulatory systems are also open to affected foreign parties	MA&NT	3	O	D
Foreign firms have redress when business practices are perceived to restrict competition	MA&NT	3	O	D
Arbitration structures are in place to deal with reinsurance disputes	DR&Other	All	O	ND
The government controls at least one major firm in the sector: life, non-life, reinsurance	DR&Other	3	E	ND
Publicly-controlled firms are subject to an exclusion or exemption from the general competition law	DR&Other	3	E	ND
Publicly-controlled firms or undertakings are subject to rules that affect the competition with private insurers	DR&Other	3	E	ND
Compulsory cession of all or a portion of risks to specified reinsurers: life, non-life	DR&Other	3	O	ND
Upper limit on the share of risks that can be ceded to reinsurers: life, non-life	DR&Other	3	O	ND
Insurance premiums, fees or margins are regulated: life, compulsory insurance, other non-life	DR&Other	All	O	ND
Restrictions on the term or value of insurance policies: life, compulsory insurance, other non-life	DR&Other	All	O	ND
Approval by the regulatory authority required for new insurance products or services: life, compulsory insurance, other non-life	DR&Other	All	O	ND
Approval by the regulatory authority required for new rates or fees: life, compulsory insurance, other non-life	DR&Other	All	O	ND
Advertising is either prohibited or subject to restrictions	DR&Other	All	O	ND
The supervisor has full authority over licensing and the enforcement of prudential measures	DR&Other	All	O	ND

Measure	MA&NT / DR&Other	Mode	Establishment / Operations	Discr. / Non- discr.
Length of term of heads of the supervisory authority	DR&Other	All	O	ND
The government can overrule the decisions of the supervisor	DR&Other	All	O	ND
The government has discretionary control over funding of the supervisory agency	DR&Other	All	O	ND
Other restrictions in barriers to competition	DR&Other	All	O	ND
<i>Regulatory transparency</i>				
Regulations are communicated to the public prior to entry into force	DR&Other	All	O	ND
Public comment procedure open to interested persons, including foreign suppliers	DR&Other	All	O	ND
Range of visa processing time (business days)	DR&Other	4	O	ND
Time to complete all official procedures to register a company (days)	DR&Other	3	O	ND
Cost to complete all official procedures for registering a company (% of income per capita)	DR&Other	3	O	ND
Number of official procedures for registering a company	DR&Other	3	O	ND
Licences are allocated according to publicly available criteria	DR&Other	3	E	ND
There is a maximum time allowed to the regulator for decisions on applications	DR&Other	3	E	ND
Other restrictions in regulatory transparency	DR&Other	All	O	ND

Table C.6. Measures included in the STRI for professional services

Legal services

Measures	MA&NT/ DR&Other	Mode	Establishment/ operations	Disc./ Non- discr.
Restrictions on foreign entry				
Foreign equity restrictions: maximum foreign equity share allowed (%)	MA&NT	3	E	D
Equity restrictions applying to not locally-licensed lawyers/firms	MA&NT	3	E	D
Legal form: sole proprietorship is prohibited	MA&NT	3	E	ND
Legal form: corporation is prohibited	MA&NT	3	E	ND
Legal form: partnership is prohibited	MA&NT	3	E	ND
Commercial association is prohibited between not fully integrated (limited license) lawyers and fully integrated lawyers	MA&NT	3	O	D
Commercial association is prohibited between lawyers and other professionals	DR&Other	3	O	ND
Prohibitions on hiring locally-licensed lawyers	MA&NT	3	O	D
The number of law firms permitted to practice is restricted by quotas	MA&NT	3	E	D
Board of directors: majority must be nationals	MA&NT	3	O	D
Board of directors: majority must be residents	MA&NT	3	O	D
Board of directors: majority must be locally-licensed lawyers	MA&NT	3	O	D
Board of directors: at least one must be national	MA&NT	3	O	D
Board of directors: at least one must be resident	MA&NT	3	O	D
Board of directors: at least one must be locally-licensed lawyers	MA&NT	3	O	D
Manager must be national	MA&NT	3	O	D
Manager must be resident	MA&NT	3	O	D
Manager must be locally-licensed lawyer	MA&NT	3	O	D
The establishment of foreign law firms is restricted by economic needs tests	MA&NT	3	E	D
Restrictions to movement of people				
Quotas: intra-corporate transferees	MA&NT	4	O	D
Quotas: contractual services suppliers	MA&NT	4	E	D
Quotas: independent services suppliers	MA&NT	4	E	D
Labour market tests: intra-corporate transferees	MA&NT	4	O	D
Labour market tests: contractual services suppliers	MA&NT	4	E	D
Labour market tests: independent services suppliers	MA&NT	4	E	D
Limitation on duration of stay for intra-corporate transferees (months):	MA&NT	4	O	D
Limitation on duration of stay for contractual services suppliers is limited to (months):	MA&NT	4	E	D
Limitation on duration of stay for independent services suppliers is limited to (months):	MA&NT	4	E	D
Nationality or citizenship required for license to practice as a fully integrated lawyer	MA&NT	All	E	D
Prior or permanent residency required for license to practice as a fully integrated lawyer	MA&NT	All	E	D
Prior or permanent residency required for license to practice under a limited license	MA&NT	All	E	D

Measures	MA&NT/ DR&Other	Mode	Establishment/ operations	Disc./ Non- discr.
Domicile required for license to practice as a fully integrated lawyer	MA&NT	All	E	D
Domicile required for license to practice under a limited license	MA&NT	All	E	D
Recognition of foreign qualifications to become a fully integrated lawyer: laws or regulations establish a process for recognising higher education degrees in law gained abroad	DR&Other	All	E	ND
Recognition of foreign qualifications to become a fully integrated lawyer: foreign lawyers are required to undertake local examinations to qualify for full membership of the profession	MA&NT	All	E	D
Recognition of foreign qualifications to become a fully integrated lawyer: foreign lawyers are required to undertake at least 1 year of local practice to become a full member of the profession	MA&NT	All	E	D
Recognition of foreign qualifications to become a fully integrated lawyer: compulsory membership in a professional association for foreign lawyers is automatically granted if the lawyer has the required qualifications	MA&NT	All	E	D
There is a limited licensing system in place	MA&NT	All	E	D
Foreign providers have to completely re-do the university degree, practice and exam in the domestic country	MA&NT	All	E	D
Other discriminatory measures				
Foreign suppliers are treated less favourably regarding taxes or eligibility to subsidies	MA&NT	All	O	D
Foreign participation in public procurement: foreign suppliers are prohibited from supplying legal services to the government or preferences are given to local suppliers	DR&Other	All	O	D
There is a formal requirement that regulators consider comparable international standards and rules before setting new domestic standards	DR&Other	All	O	ND
Use of foreign/international firm names: the use of foreign firm names is prohibited	MA&NT	3	O	D
Use of foreign/international firm names: the use of foreign firm names is allowed only alongside that of a local partner	MA&NT	3	O	D
Use of foreign/international firm names: only locally-licensed lawyers may use the name or title Lawyer	MA&NT	3	O	D
Barriers to competition				
When appeal procedures are available in domestic regulatory systems, they are open to affected or interested foreign parties as well	MA&NT	3	O	D
Foreign firms have redress when business practices are perceived to restrict competition in a given market	MA&NT	3	O	D
Fee-setting: mandatory minimum and/or maximum fees	DR&Other	All	O	ND
Fee-setting: recommended minimum and/or maximum fees	DR&Other	All	O	ND
Advertising and marketing: lawyers are either prohibited to advertise or subject to restrictions on advertising	DR&Other	All	O	ND
Advertising and marketing: only locally-licensed lawyers are permitted to advertise and market legal services	MA&NT	All	O	D
Regulatory transparency				
Regulations are published or otherwise communicated to the public prior to entry into force	DR&Other	All	O	ND

Measures	MA&NT/ DR&Other	Mode	Establishment/ operations	Disc./ Non- discr.
There is a public comment procedure open to interested persons, and/or the regulator has a formal mechanism for consultation with stakeholders, including foreign suppliers	DR&Other	All	O	ND
Range of visa processing time (days)	DR&Other	4	O	ND
Time to complete all official procedures required to register a company (in calendar days)	DR&Other	3	O	ND
Total cost to complete all official procedures required to register a company (in USD)	DR&Other	3	O	ND
Number of official procedures required to register a company	DR&Other	3	O	ND

Accounting and auditing services

Measures	MA&NT/ DR&Other	Mode 3	Establishment/ operations	Disc./ non- disc.
<i>Restrictions on foreign entry</i>				
Foreign equity restrictions: maximum foreign equity share allowed (%)	MA&NT	3	E	D
Equity restrictions applying to not locally-licensed accountants and auditors/firms	MA&NT	3	E	D
Legal form: sole proprietorship is prohibited	MA&NT	3	E	ND
Legal form: corporation is prohibited	MA&NT	3	E	ND
Legal form: partnership is prohibited	MA&NT	3	E	ND
Commercial association is prohibited between accountants and auditors and other professionals	DR&Other	3	O	ND
The number of accounting firms permitted to practice is restricted by quotas	MA&NT	3	E	D
The establishment of foreign accounting firms is restricted by economic needs tests	MA&NT	3	E	D
Board of directors: majority must be nationals	MA&NT	3	O	D
Board of directors: majority must be residents	MA&NT	3	O	D
Board of directors: majority must be locally-licensed accountants and auditors	MA&NT	3	O	D
Board of directors: at least one must be national	MA&NT	3	O	D
Board of directors: at least one must be resident	MA&NT	3	O	D
Board of directors: at least one must be locally-licensed accountants and auditors	MA&NT	3	O	D
Manager must be national	MA&NT	3	O	D
Manager must be resident	MA&NT	3	O	D
Manager must be locally-licensed accountant and auditor	MA&NT	3	O	D
<i>Restrictions to movement of people</i>				
Quotas: intra-corporate transferees	MA&NT	4	O	D
Quotas: contractual services suppliers	MA&NT	4	E	D
Quotas: independent services suppliers	MA&NT	4	E	D
Labour market tests: intra-corporate transferees	MA&NT	4	O	D
Labour market tests: contractual services suppliers	MA&NT	4	E	D
Labour market tests: independent services suppliers	MA&NT	4	E	D
Limitation on duration of stay for intra-corporate transferees (months):	MA&NT	4	O	D
Limitation on duration of stay for contractual services suppliers is limited to (months):	MA&NT	4	E	D
Limitation on duration of stay for independent services suppliers is limited to (months):	MA&NT	4	E	D
Nationality or citizenship required for license to practice accounting and auditing	MA&NT	All	E	D
Residency required for license to practice accounting and auditing: prior or permanent residency	MA&NT	All	E	D
Residency required for license to practice accounting and auditing: domicile	MA&NT	All	E	D
Recognition of foreign qualifications for accountants and auditors: laws or regulations establish a process for recognising higher education degrees in accounting and auditing gained abroad	DR&Other	All	E	ND

Measures	MA&NT/ DR&Other	Mode 3	Establishment/ operations	Disc./ non- disc.
Recognition of foreign qualifications for accountants and auditors: foreign accountants and auditors are required to undertake local examinations to qualify for full membership of the profession	MA&NT	All	E	D
Recognition of foreign qualifications for accountants and auditors: foreign accountants and auditors are required to undertake at least 1 year of local practice to become a full member of the profession	MA&NT	All	E	D
Recognition of foreign qualifications for accountants and auditors: compulsory membership in a professional association for foreign accountants and auditors is automatically granted if the accountant or auditor has the required qualifications	MA&NT	All	E	D
A limited or temporary licensing system is available	MA&NT	All	E	D
Foreign providers have to completely re-do the university degree, practice and exam in the domestic country	MA&NT	All	E	D
Other discriminatory measures				
Foreign suppliers are treated less favourably regarding taxes or eligibility to subsidies	MA&NT	All	O	D
Foreign participation in public procurement: foreign suppliers are prohibited from supplying accounting and auditing services to the government or preferences are given to local suppliers	DR&Other	All	O	D
Laws, regulations or relevant standard-setter require the use of or have adopted the international standards on auditing (ISAs)	DR&Other	All	O	ND
There is a formal requirement that regulators consider comparable international standards and rules before setting new domestic standards	DR&Other	All	O	ND
Use of foreign/international firm names: the use of foreign firm names is prohibited	MA&NT	All	O	D
Use of foreign/international firm names: the use of foreign firm names is allowed only alongside that of a local partner	MA&NT	All	O	D
Use of foreign/international firm names: only locally-licensed accountants and auditors may use the name or title Accountants and Auditors	MA&NT	All	O	D
Barriers to competition				
When appeal procedures are available in domestic regulatory systems, they are open to affected or interested foreign parties as well	MA&NT	3	O	D
Foreign firms have redress when business practices are perceived to restrict competition in a given market	MA&NT	3	O	D
Fee-setting: mandatory minimum and/or maximum fees	DR&Other	All	O	ND
Fee-setting: : recommended minimum and/or maximum fees	DR&Other	All	O	ND
Advertising and marketing: accountants and auditors are either prohibited to advertise or subject to restrictions on advertising	DR&Other	All	O	ND
Advertising and marketing: only locally-licensed accountants and auditors are permitted to advertise and market these services	MA&NT	All	O	D
Regulatory transparency				
Regulations are published or otherwise communicated to the public prior to entry into force	DR&Other	All	O	ND
There is a public comment procedure open to interested persons, and/or the regulator has a formal mechanism for consultation with stakeholders, including foreign suppliers	DR&Other	All	O	ND
Range of visa processing time (days)	DR&Other	4	O	ND

Measures	MA&NT/ DR&Other	Mode 3	Establishment/ operations	Disc./ non- disc.
Time to complete all official procedures required to register a company (in calendar days)	DR&Other	3	O	ND
Total cost to complete all official procedures required to register a company (in USD)	DR&Other	3	O	ND
Number of official procedures required to register a company	DR&Other	3	O	ND

Architecture services

Measures	MA&NT/ DR&Other	Mode	Establishment/ operations	Discr./ non- discr.
<i>Restrictions on foreign entry</i>				
Foreign equity restrictions: maximum foreign equity share allowed (%)	MA&NT	3	E	D
Equity restrictions applying to not locally-licensed architects	MA&NT	3	E	D
Legal form: sole proprietorship is prohibited	MA&NT	3	E	ND
Legal form: corporation is prohibited	MA&NT	3	E	ND
Legal form: partnership is prohibited	MA&NT	3	E	ND
Commercial association is prohibited between architects and other professionals	DR&Other	3	O	ND
Commercial association is required between not locally-licensed architects (or with limited license) and locally-licensed architects	MA&NT	3	O	D
The number of architectural firms permitted to practice is restricted by quotas	MA&NT	3	E	D
Board of directors: majority must be nationals	MA&NT	3	O	D
Board of directors: majority must be residents	MA&NT	3	O	D
Board of directors: majority must be locally-licensed architects	MA&NT	3	O	D
Board of directors: at least one must be national	MA&NT	3	O	D
Board of directors: at least one must be resident	MA&NT	3	O	D
Board of directors: at least one must be locally-licensed architects	MA&NT	3	O	D
Manager must be national	MA&NT	3	O	D
Manager must be resident	MA&NT	3	O	D
Manager must be locally-licensed architect	MA&NT	3	O	D
The establishment of foreign architectural firms is restricted by economic needs tests	MA&NT	3	E	D
Acquisition of land and real estate by foreigners is prohibited	MA&NT	3	E	D
Acquisition of land and real estate by foreigners is subject to restrictions	MA&NT	3	E	D
<i>Restrictions to movement of people</i>				
Quotas: intra-corporate transferees	MA&NT	4	E	D
Quotas: contractual services suppliers	MA&NT	4	E	D
Quotas: independent services suppliers	MA&NT	4	E	D
Labour market tests: intra-corporate transferees	MA&NT	4	E	D
Labour market tests: contractual services suppliers	MA&NT	4	E	D
Labour market tests: independent services suppliers	MA&NT	4	E	D
Limitation on duration of stay for intra-corporate transferees (months):	MA&NT	4	E	D
Limitation on duration of stay for contractual services suppliers is limited to (months):	MA&NT	4	E	D
Limitation on duration of stay for independent services suppliers is limited to (months):	MA&NT	4	E	D
Nationality or citizenship required for license to practice architectural services	MA&NT	All	E	D
Residency required for license to practice architectural services: prior or permanent residency	MA&NT	All	E	D

Measures	MA&NT/ DR&Other	Mode	Establishment/ operations	Discr./ non- discr.
Residency required for license to practice architectural services: domicile	MA&NT	All	E	D
Recognition of foreign qualifications for architects: laws or regulations establish a process for recognising higher education degrees in architecture gained abroad	DR&Other	All	E	ND
Recognition of foreign qualifications for architects: foreign architects are required to undertake local examinations to qualify for full membership of the profession	MA&NT	All	E	D
Recognition of foreign qualifications for architects: foreign architects are required to undertake at least 1 year of local practice to become a full member of the profession	MA&NT	All	E	D
Recognition of foreign qualifications for architects: compulsory membership in a professional association for foreign architects is automatically granted if the architect has the required qualifications	MA&NT	All	E	ND
License/practice authorisation is required for architects authorised to practice in their home country	DR&Other	4	E	ND
Limited or temporary licensing system is available to practice architectural services	MA&NT	4	E	D
Foreign providers have to completely re-do the university degree, practice and exam in the domestic country	MA&NT	All	E	D
Other discriminatory measures				
Foreign suppliers are treated less favourably regarding taxes or eligibility to subsidies	MA&NT	All	O	D
Foreign participation in public procurement: foreign suppliers are prohibited from supplying architectural services to the government or preferences are given to local suppliers	DR&Other	All	O	D
There is a formal requirement that regulators consider comparable international standards and rules before setting new domestic standards	DR&Other	All	O	ND
Use of foreign/international firm names: the use of foreign firm names is prohibited	MA&NT	All	O	D
Use of foreign/international firm names: the use of foreign firm names is allowed only alongside that of a local partner	MA&NT	All	O	D
Use of foreign/international firm names: only locally-licensed architects may use the title Architect	MA&NT	All	O	D
Barriers to competition				
When appeal procedures are available in domestic regulatory systems, they are open to affected or interested foreign parties as well	MA&NT	3	O	D
Foreign firms have redress when business practices are perceived to restrict competition in a given market	MA&NT	3	O	D
Fee-setting: mandatory minimum and/or maximum fees	DR&Other	All	E	ND
Fee-setting: : recommended minimum and/or maximum fees	DR&Other	All	E	ND
Advertising and marketing: architects are either prohibited to advertise or subject to restrictions on advertising	DR&Other	All	O	ND
Advertising and marketing: only locally-licensed architects are permitted to advertise and market these services	MA&NT	All	O	D
Regulatory transparency				
Regulations are published or otherwise communicated to the public prior to entry into force	DR&Other	All	O	ND

Measures	MA&NT/ DR&Other	Mode	Establishment/ operations	Discr./ non- discr.
There is a public comment procedure open to interested persons, and/or the regulator has a formal mechanism for consultation with stakeholders, including foreign suppliers	DR&Other	All	O	ND
Range of visa processing time (days)	DR&Other	4	O	ND
Time to complete all official procedures required to register a company (in calendar days)	DR&Other	3	O	ND
Total cost to complete all official procedures required to register a company (in USD)	DR&Other	3	O	ND
Number of official procedures required to register a company	DR&Other	3	O	ND

Engineering services

Measures	MA&NT/ DR&Other	Mode	Establishment/ operations	Discr./ non- discr.
<i>Restrictions on foreign entry</i>				
Foreign equity restrictions: maximum foreign equity share allowed (%)	MA&NT	3	E	D
Equity restrictions applying to not locally-licensed engineers	MA&NT	3	E	D
Legal form: sole proprietorship is prohibited	MA&NT	3	E	ND
Legal form: corporation is prohibited	MA&NT	3	E	ND
Legal form: partnership is prohibited	MA&NT	3	E	ND
Commercial association is prohibited between engineers and other professionals	DR&Other	3	O	ND
Commercial association is required between not locally-licensed engineers (or with limited license) and locally-licensed engineers	MA&NT	3	O	D
The number of engineering firms permitted to practice is restricted by quotas	MA&NT	3	E	D
Board of directors: majority must be nationals	MA&NT	3	O	D
Board of directors: majority must be residents	MA&NT	3	O	D
Board of directors: majority must be locally-licensed engineers	MA&NT	3	O	D
Board of directors: at least one must be national	MA&NT	3	O	D
Board of directors: at least one must be resident	MA&NT	3	O	D
Board of directors: at least one must be locally-licensed engineers	MA&NT	3	O	D
Manager must be national	MA&NT	3	O	D
Manager must be resident	MA&NT	3	O	D
Manager must be locally-licensed engineer	MA&NT	3	O	D
The establishment of foreign engineering firms is restricted by economic needs tests	MA&NT	3	E	D
Acquisition of land and real estate by foreigners is prohibited	MA&NT	3	E	D
Acquisition of land and real estate by foreigners is subject to restrictions	MA&NT	3	E	D
<i>Restrictions to movement of people</i>				
Quotas: intra-corporate transferees	MA&NT	4	E	D
Quotas: contractual services suppliers	MA&NT	4	E	D
Quotas: independent services suppliers	MA&NT	4	E	D
Labour market tests: intra-corporate transferees	MA&NT	4	E	D
Labour market tests: contractual services suppliers	MA&NT	4	E	D
Labour market tests: independent services suppliers	MA&NT	4	E	D
Limitation on duration of stay for intra-corporate transferees (months):	MA&NT	4	E	D
Limitation on duration of stay for contractual services suppliers is limited to (months):	MA&NT	4	E	D
Limitation on duration of stay for independent services suppliers is limited to (months):	MA&NT	4	E	D
Nationality or citizenship required for license to practice engineering services	MA&NT	All	E	D
Residency required for license to practice engineering services: prior or permanent residency	MA&NT	All	E	D

Measures	MA&NT/ DR&Other	Mode	Establishment/ operations	Discr./ non- discr.
Residency required for license to practice engineering services: domicile	MA&NT	All	E	D
Recognition of foreign qualifications for engineers: laws or regulations establish a process for recognising higher education degrees in engineering gained abroad	DR&Other	All	E	ND
Recognition of foreign qualifications for engineers: foreign architects are required to undertake local examinations to qualify for full membership of the profession	MA&NT	All	E	D
Recognition of foreign qualifications for engineers: foreign architects are required to undertake at least 1 year of local practice to become a full member of the profession	MA&NT	All	E	D
Recognition of foreign qualifications for engineers: compulsory membership in a professional association for foreign architects is automatically granted if the engineer has the required qualifications	MA&NT	All	E	ND
License/practice authorisation is required for engineers authorised to practice in their home country	DR&Other	4	E	ND
Limited or temporary licensing system is available to practice engineering services	MA&NT	4	E	D
Foreign providers have to completely re-do the university degree, practice and exam in the domestic country	MA&NT	All	E	D
Other discriminatory measures				
Foreign suppliers are treated less favourably regarding taxes or eligibility to subsidies	MA&NT	All	O	D
Foreign participation in public procurement: foreign suppliers are prohibited from supplying architectural services to the government or preferences are given to local suppliers	DR&Other	All	O	D
There is a formal requirement that regulators consider comparable international standards and rules before setting new domestic standards	DR&Other	All	O	ND
Use of foreign/international firm names: the use of foreign firm names is prohibited	MA&NT	All	O	D
Use of foreign/international firm names: the use of foreign firm names is allowed only alongside that of a local partner	MA&NT	All	O	D
Use of foreign/international firm names: only locally-licensed engineers may use the title Engineer	MA&NT	All	O	D
Barriers to competition				
When appeal procedures are available in domestic regulatory systems, they are open to affected or interested foreign parties as well	MA&NT	3	O	D
Foreign firms have redress when business practices are perceived to restrict competition in a given market	MA&NT	3	O	D
Fee-setting: mandatory minimum and/or maximum fees	DR&Other	All	E	ND
Fee-setting: : recommended minimum and/or maximum fees	DR&Other	All	E	ND
Advertising and marketing: engineers are either prohibited to advertise or subject to restrictions on advertising	DR&Other	All	O	ND
Advertising and marketing: only locally-licensed architects are permitted to advertise and market these services	MA&NT	All	O	D
Regulatory transparency				
Regulations are published or otherwise communicated to the public prior to entry into force	DR&Other	All	O	ND

Measures	MA&NT/ DR&Other	Mode	Establishment/ operations	Discr./ non- discr.
There is a public comment procedure open to interested persons, and/or the regulator has a formal mechanism for consultation with stakeholders, including foreign suppliers	DR&Other	All	O	ND
Range of visa processing time (days)	DR&Other	4	O	ND
Time to complete all official procedures required to register a company (in calendar days)	DR&Other	3	O	ND
Total cost to complete all official procedures required to register a company (in USD)	DR&Other	3	O	ND
Number of official procedures required to register a company	DR&Other	3	O	ND

Table C.7. Measures included in the STRI for telecommunications (fixed, mobile and Internet separately when relevant)

Measure	MA&NT/ DR&Other	Mode	Establishment/ operations	Discr./ non-discr.
Restrictions on foreign market entry				
Foreign equity restrictions: maximum foreign equity share allowed (%) (fixed, mobile, internet)	MA&NT	3	E	D
Non-residents are allowed to invest in local telecommunication services firm through minority shares in local investment companies: Maximum foreign equity limit in such investment companies (%). (fixed, mobile, internet)	MA&NT	3	E	D
There are statutory or other legal limits to the number or proportion of shares that can be acquired by foreign investors in firms that are controlled by national state or provincial governments (fixed, mobile, internet)	MA&NT	3	E	D
Legal form: only joint ventures are allowed (fixed, mobile, internet)	MA&NT	3	E	D
The number of firms permitted to practice is restricted by quotas (fixed, mobile, internet)	MA&NT	3	E	D
Board of directors: majority must be nationals (fixed, mobile, internet)	MA&NT	3	O	D
Board of directors: majority must be residents (fixed, mobile, internet)	MA&NT	3	O	D
Board of directors: at least one must be national (fixed, mobile, internet)	MA&NT	3	O	D
Board of directors: at least one must be resident (fixed, mobile, internet)	MA&NT	3	O	D
Manager must be national (fixed, mobile, internet)	MA&NT	3	O	D
Manager must be resident (fixed, mobile, internet)	MA&NT	3	O	D
Screening: foreign investors must show net economic benefits (fixed, mobile, internet)	MA&NT	3	E	D
Screening: approval unless contrary to national interest (fixed, mobile, internet)	MA&NT	3	E	D
Screening: notification (fixed, mobile, internet)	other	3	E	D
Restrictions on type of shares or bonds held by foreign investors (fixed, mobile, internet)	MA&NT	3	E	D
Conditions on subsequent transfer of capital and investments (fixed, mobile, internet)	MA&NT	3	E	D
Restrictions on cross-border mergers and acquisitions (fixed, mobile, internet)	MA&NT	3	E	D
Other restrictions				
Restrictions on the movement of people				
Quotas: intra-corporate transferees	MA&NT	4	O	D
Quotas: contractual services suppliers	MA&NT	4	E	D
Quotas: independent services suppliers	MA&NT	4	E	D
Labour market tests: intra-corporate transferees	MA&NT	4	O	D

Measure	MA&NT/ DR&Other	Mode	Establishment/ operations	Discr./ non- discr.
Labour market tests: contractual services suppliers	MA&NT	4	E	D
Labour market tests: independent services suppliers	MA&NT	4	E	D
Limitation on duration of stay for intra-corporate transferees (months)	MA&NT	4	O	D
Limitation on duration of stay for contractual services suppliers is limited to (months)	MA&NT	4	E	D
Limitation on duration of stay for independent services suppliers is limited to (months)	MA&NT	4	E	D
Other discriminatory measures				
Foreign suppliers are treated less favourably regarding taxes and eligibility to subsidies.	MA&NT	3	O	D
Foreign participation in public procurement: discrimination in the application of financial or technical criteria for project tender.	other	All	O	D
There is a formal requirement that regulators consider comparable international standards and rules before setting new domestic standards.	DR	All	O	ND
Other restrictions				
Barriers to competition				
The decision of the regulator can be appealed	other	3	O	ND
Foreign firms have redress when business practices are perceived to restrict competition in a given market	MA&NT	3	O	D
National, state or provincial government control at least one major firm in the sector (fixed, mobile, internet)	other	3	E	ND
Publicly-controlled firms or undertakings are subject to an exclusion or exemption, either complete or partial, from the application of the general competition law (fixed, mobile, internet)	other	3	E	ND
National state or provincial government have special voting rights (e.g. golden shares) in any firms in the sector (fixed, mobile, internet)	other	3	E	ND
The government can overrule the decisions of the telecommunications regulator	other	3	O	D
Access to and use of public telecommunications service is mandated (fixed, mobile, internet)	other	All	O	ND
Wholesale access prices are regulated (fixed, mobile, internet)	other	All	O	ND
Interconnection is mandated (fixed, mobile)	other	all	O	ND
Interconnection prices and conditions are regulated (fixed, mobile)	other	all	O	ND
Interconnection and/or access agreements are made public	other	all	O	ND
Unbundling of the local loop is required	other	3	O	ND
Local loop unbundling prices are regulated	other	3	O	ND
Collocation or site sharing is mandated	other	3	O	ND
Resale of public telecommunications services to other suppliers of telecommunications services, including foreign suppliers are mandated (fixed, mobile)	other	all	O	ND

Measure	MA&NT/ DR&Other	Mode	Establishment/ operations	Discr./ non- discr.
Rates and conditions for resale by dominant firms of public telecommunications services to other suppliers of telecommunications services are regulated (fixed, mobile)	other	all	O	ND
Secondary spectrum trading is allowed	other	all	O	ND
Mobile termination rates are regulated	other	all	O	ND
Wholesale roaming rates are regulated	other	all	O	ND
Retail roaming rates are regulated	other	all	O	ND
Number portability is required (fixed, mobile, VOIP)	other	all	O	ND
Time and conditions for porting are regulated (fixed, mobile, VOIP)	other	all	O	ND
Dialing parity is required (fixed, mobile, VOIP)	other	all	O	ND
Vertical separation is required (fixed, mobile, internet)	other	3	O	ND
Contracts for universal services obligations are assigned through grandfathering (fixed, mobile, internet)	other	all	O	ND
Minimum capital requirement (fixed, mobile, internet)	other	3	E	ND
Regulatory transparency				
Licensing agreements are publicly available	other	all	O	ND
Information on spectrum (regulations, spectrum management table, spectrum fees etc.) are publicly available	other	all	O	ND
Regulations are published or otherwise communicated to the public prior to entry into force	other	all	O	ND
There is a public comment procedure open to interested persons, and/or the regulator has a formal mechanism for consultation with stakeholders, including foreign suppliers	other	all	O	ND
Range of visa processing time (days)	other	4	O	ND
Time to complete all official procedures required to register a company (in calendar days)	other	3	O	ND
Total cost to complete all official procedures required to register a company (in USD)	other	3	O	ND
Number of official procedures required to register a company	other	3	O	ND

Table C.8. Measures included in the STRI for transport and courier services

Air transport services (passenger and cargo)

Measures	Mode	Establishment/ operations	Discriminatory/ non-discriminatory
Restrictions on foreign entry			
Foreign equity restrictions: maximum foreign equity share allowed for domestic traffic (%)	3	E	D
Foreign equity restrictions: maximum foreign equity share allowed for international traffic (%)	3	E	D
There are statutory or other legal limits to the number or proportion of shares that can be acquired by foreign investors in firms that are controlled by national state or provincial governments	3	E	D
Only joint ventures are allowed (domestic traffic)	3	E	D
Only joint ventures are allowed (international traffic)	3	E	D
Foreign companies can establish subsidiaries (domestic traffic)	3	E	D
Foreign companies can establish subsidiaries (international traffic)	3	E	D
Foreign companies can establish branches	3	E	D
Board of directors: majority must be nationals (domestic traffic)	3	O	D
Board of directors: majority must be nationals (international traffic)	3	O	D
Board of directors: majority must be residents (domestic traffic)	3	O	D
Board of directors: majority must be residents (international traffic)	3	O	D
Board of directors: at least one must be national (domestic traffic)	3	O	D
Board of directors: at least one must be national (international traffic)	3	O	D
Board of directors: at least one must be resident (domestic traffic)	3	O	D
Board of directors: at least one must be resident (international traffic)	3	O	D
Manager must be national (domestic traffic)	3	O	D
Manager must be national (international traffic)	3	O	D
Manager must be resident (domestic traffic)	3	O	D
Manager must be resident (international traffic)	3	O	D
Screening: foreign investors must show net economic benefits	3	E	D
Screening: approval unless contrary to national interest	3	E	D
Screening: notification	3	E	D
Restrictions on the type of shares or bonds held by foreign investors	3	E	D
Conditions on subsequent transfer of capital and investments	3	E	D
Restrictions on cross-border mergers and acquisitions (domestic traffic)	3	E	D
Restrictions on cross-border mergers and acquisitions (international traffic)	3	E	D
Licensing/permits are subject to quotas or economic needs tests (domestic traffic)	3	E	D
Licensing/permits are subject to quotas or economic needs tests (international traffic)	3	E	D
Provisions in bilateral/plurilateral agreements			
Grant of traffic rights	1	O	D
Route schedules	1	O	D
Designation	1	O	D

Measures	Mode	Establishment/ operations	Discriminatory/ non-discriminatory
Capacity	1	O	D
Ownership and control	1	O	D
Restrictions to movement of people			
Quotas: intra-corporate transferees	4	O	D
Quotas: contractual services suppliers	4	E	D
Quotas: independent services suppliers	4	E	D
Labour market tests: intra-corporate transferees	4	O	D
Labour market tests: contractual services suppliers	4	E	D
Labour market tests: independent services suppliers	4	E	D
Limitation on duration of stay for intra-corporate transferees	4	O	D
Limitation on duration of stay for contractual services suppliers is limited	4	E	D
Limitation on duration of stay for independent services suppliers is limited	4	E	D
Other discriminatory measures			
Foreign suppliers are treated less favourably regarding taxes and eligibility to subsidies	All	O	D
Restrictions on public procurement: explicit discrimination in favour of local firms (domestic traffic)	All	O	D
Restrictions on public procurement: explicit discrimination in favour of local firms (international traffic)	All	O	D
The procurement process affects the conditions of competition in favour of local firms (domestic traffic)	All	O	D
The procurement process affects the conditions of competition in favour of local firms (international traffic)	All	O	D
Laws and regulations impose national standards that deviate from international standards/conventions	All	O	ND
Provisions in bilateral/plurilateral agreements			
Pricing	1	O	D
Ground-handling	1	O	D
Other commercial opportunities	1	O	D
User charges	1	O	D
Cooperative arrangements	1	O	D
Change of aircraft	1	O	D
Barriers to competition			
When appeal procedures are available in domestic regulatory systems, they are open to affected or interested foreign parties as well	3	O	D
Foreign firms have redress when business practices are perceived to restrict competition in a given market	3	O	D
National, state or provincial government control at least one major firm in the sector	3	E	ND
Publicly-controlled firms or undertakings are subject to an exclusion or exemption, either complete or partial, from the application of the general competition law	3	E	ND
Minimum capital requirements	3	E	ND

Measures	Mode	Establishment/ operations	Discriminatory/ non-discriminatory
Slot allocation systems	All	O	ND
Slot trading	All	O	ND
Schedules for airport use	All	O	ND
Exemption of air carrier alliances from competition law	All	O	ND
Price regulation on domestic routes	All	O	ND
Contracts for universal service obligations are awarded through competitive bidding	All	O	ND
<i>Regulatory transparency</i>			
Regulations are published or otherwise communicated to the public prior to entry into force	All	O	ND
There is a public comment procedures open to interested persons, including foreign suppliers	All	O	ND
Range of visa processing time	4	O	ND
Time to complete all official procedures required to register a company	3	O	ND
Total cost to complete all official procedures required to register a company	3	O	ND
Number of official procedures required to register a company	3	O	ND
Time taken for customs clearance (cargo only)	All	O	ND

Maritime transport

Measures	MA&NT/ DR&Other	Mode	Establishment/ operations	Discr./ non- discr.
<i>Restrictions on foreign entry</i>				
Foreign equity restrictions: maximum foreign equity share allowed (%)	MA&NT	3	E	D
There are statutory or other legal limits to the number or proportion of shares that can be acquired by foreign investors in firms that are controlled by national state or provincial governments	MA&NT	3	E	D
Only joint ventures are allowed	MA&NT	3	E	D
Foreign companies can establish subsidiaries	MA&NT	3	E	D
Foreign companies can establish branches	MA&NT	3	E	D
Other restrictions on legal form	MA&NT	3	E	D
Board of directors: majority must be nationals	MA&NT	3	O	D
Board of directors: majority must be residents	MA&NT	3	O	D
Board of directors: at least one must be national	MA&NT	3	O	D
Board of directors: at least one must be resident	MA&NT	3	O	D
Manager must be national	MA&NT	3	O	D
Manager must be resident	MA&NT	3	O	D
Screening: foreign investors must show net economic benefits	MA&NT	3	E	D
Screening: approval unless contrary to national interest	MA&NT	3	E	D
Screening: notification	MA&NT	3	E	D
Restrictions on the type of shares or bonds held by foreign investors	MA&NT	3	E	D
Conditions on subsequent transfer of capital and investments	MA&NT	3	E	D
Restrictions on cross-border mergers and acquisitions	MA&NT	3	E	D
Cargo reservation: Unilateral cargo reservations	MA&NT	1	E	D
Cargo reservation: Bilateral/plurilateral cargo sharing agreements	MA&NT	1	E	D
Cargo reservation: Plurilateral cargo reservations (UNCTAD Liner Code of Conduct)	MA&NT	1	E	D
Cargo reservation: Government cargo	MA&NT	1	E	D
Cargo reservation: Other cargo reservations and preferential schemes	MA&NT	1	E	D
Restrictions to own and register vessels under national flags	MA&NT	1	E	D
Cabotage: Exclusion foreign-flagged ships (or other criteria, such as foreign-built ships)	MA&NT	1	E	D
Cabotage: Feederling is prohibited	MA&NT	All	E	D
Cabotage: Repositioning of equipment is prohibited	MA&NT	All	E	D
Statutory monopoly on port services	MA&NT	3	E	D
Restrictions on the number of licenses/concessions	MA&NT	3	E	D
Restrictions on the type of vessels	MA&NT	All	E	D
Restrictions on the type and quantity of cargo transported	MA&NT	All	E	D
Restrictions to establish or operate representative offices	MA&NT	3	E	D
Restrictions on the chartering of vessels	MA&NT		E	D
<i>Restrictions to movement of people</i>				
Quotas: intra-corporate transferees	MA&NT	4	O	D
Quotas: contractual services suppliers	MA&NT	4	E	D
Quotas: independent services suppliers	MA&NT	4	E	D

Measures	MA&NT/ DR&Other	Mode	Establishment/ operations	Discr./ non- discr.
Labour market tests: intra-corporate transferees	MA&NT	4	O	D
Labour market tests: contractual services suppliers	MA&NT	4	E	D
Labour market tests: independent services suppliers	MA&NT	4	E	D
Limitation on duration of stay for intra-corporate transferees	MA&NT	4	O	D
Limitation on duration of stay for contractual services suppliers is limited	MA&NT	4	E	D
Limitation on duration of stay for independent services suppliers is limited	MA&NT	4	E	D
Other discriminatory measures				
Foreign suppliers are treated less favourably regarding taxes and eligibility to subsidies	MA&NT	All	O	D
Explicit discrimination in favour of local firms for domestic traffic	DR&Other	All	O	D
Explicit discrimination in favour of local firms for international traffic	DR&Other	All	O	D
There are limitations on foreign participation in public procurement for domestic traffic	DR&Other	All	O	D
There are limitations on foreign participation in public procurement for international traffic	DR&Other	All	O	D
There is a formal requirement that regulators consider comparable international standards and rules before setting new domestic standards	DR&Other	All	O	ND
Discriminatory access to use of port services and installations	MA&NT	1	O	D
Discriminatory port tariffs and other port-related fees	MA&NT	1	O	D
Obligation to use local maritime and port services	MA&NT	1	O	D
Discriminatory environmental and/or security standards	MA&NT	All	O	D
Other restrictions	MA&NT	1	O	D
Obligation to use a local maritime port agent	MA&NT	All	O	D
Obligation to use local tug and tow services	MA&NT	All	O	D
Restrictions on cargo-handling	MA&NT	All	O	D
Restrictions on pilotage and towing services	MA&NT	All	O	D
Restrictions on storage and warehouse services	MA&NT	All	O	D
Restrictions on container-station and depot services	MA&NT	All	O	D
Other restrictions on auxiliary services	MA&NT	All	O	D
Restrictions on sale & marketing and organising the ship's call	MA&NT	3	O	D
Barriers to competition				
When appeal procedures are available in domestic regulatory systems, they are open to affected or interested foreign parties as well.	MA&NT	3	O	D
Foreign firms have redress when business practices are perceived to restrict competition in a given market	MA&NT	3	O	D
National, state or provincial government control at least one major firm in the sector	DR&Other	3	E	ND
Publicly-controlled firms or undertakings are subject to an exclusion or exemption, either complete or partial, from the application of the general competition law.	DR&Other	3	E	ND
Minimum capital requirements	DR&Other	3	E	ND

Measures	MA&NT/ DR&Other	Mode	Establishment/ operations	Discr./ non- discr.
Shipping agreements are partly or fully exempted from price fixing or quantity regulation under the competition law	DR&Other	All	O	ND
Right of independent action and confidential services contracts in shipping agreements are mandated	DR&Other	All	O	ND
Consortia are allowed	DR&Other	All	O	ND
Shipping agreements are subject to review	DR&Other	All	O	ND
Regulatory transparency				
Regulations are published or otherwise communicated to the public prior to entry into force	DR&Other	All	O	ND
There is a public comment procedures open to interested persons, including foreign suppliers	DR&Other	All	O	ND
Range of visa processing time (days)	DR&Other	4	O	ND
Time to complete all official procedures required to register a company (in calendar days)	DR&Other	3	O	ND
Total cost to complete all official procedures required to register a company (in % of income per capita)	DR&Other	3	O	ND
Number of official procedures required to register a company	DR&Other	3	O	ND
Time taken for customs clearance (days)	DR&Other	All	O	ND

Road freight transport services

Measures	MA&NT/ DR&Other	Mode	Establishment/ operations	Discr./ non- discr.
<i>Restrictions on foreign entry</i>				
Foreign equity restrictions: maximum foreign equity share allowed (%)	MA&NT	3	E	D
There are statutory or other legal limits to the number or proportion of shares that can be acquired by foreign investors in firms that are controlled by national state or provincial governments	MA&NT	3	E	D
Only joint ventures are allowed	MA&NT	3	E	D
Foreign companies can establish subsidiaries	MA&NT	3	E	D
Foreign companies can establish branches	MA&NT	3	E	D
Board of directors: majority must be nationals	MA&NT	3	O	D
Board of directors: majority must be residents	MA&NT	3	O	D
Board of directors: at least one must be national	MA&NT	3	O	D
Board of directors: at least one must be resident	MA&NT	3	O	D
Manager must be national	MA&NT	3	O	D
Manager must be resident	MA&NT	3	O	D
Screening: foreign investors must show net economic benefits	MA&NT	3	E	D
Screening: approval unless contrary to national interest	MA&NT	3	E	D
Screening: notification	MA&NT	3	E	D
Restrictions on the type of shares or bonds held by foreign investors	MA&NT	3	E	D
Conditions on subsequent transfer of capital and investments	MA&NT	3	E	D
Restrictions on cross-border mergers and acquisitions	MA&NT	3	E	D
Licensing/permits are subject to quotas for domestic traffic	MA&NT	3	E	D
Licensing/permits are subject to an economic needs test	MA&NT	3	E	D
Commercial presence required in order to provide road freight transport	MA&NT	All	E	D
<i>Restrictions to movement of people</i>				
Quotas: intra-corporate transferees	MA&NT	4	O	D
Quotas: contractual services suppliers	MA&NT	4	E	D
Quotas: independent services suppliers	MA&NT	4	E	D
Labour market tests: intra-corporate transferees	MA&NT	4	O	D
Labour market tests: contractual services suppliers	MA&NT	4	E	D
Labour market tests: independent services suppliers	MA&NT	4	E	D
Limitation on duration of stay for intra-corporate transferees	MA&NT	4	O	D
Limitation on duration of stay for contractual services suppliers is limited	MA&NT	4	E	D
Limitation on duration of stay for independent services suppliers is limited	MA&NT	4	E	D
<i>Other discriminatory measures</i>				
Foreign suppliers are treated less favourably regarding taxes and eligibility to subsidies	MA&NT	All	O	D
Restrictions on public procurement: explicit discrimination in favour of local firms	DR&Other	All	O	D
The procurement process affects the conditions of competition in favour of local firms	DR&Other	All	O	D

Measures	MA&NT/ DR&Other	Mode	Establishment/ operations	Discr./ non- discr.
Laws or regulations impose national standards that deviate from international standards/conventions	DR&Other	All	O	ND
Barriers to competition				
When appeal procedures are available in domestic regulatory systems, they are open to affected or interested foreign parties as well	MA&NT	3	O	D
Foreign parties have redress when business practices are perceived to restrict competition in a given market	MA&NT	3	O	D
National, state or provincial government control at least one major firm in the sector	DR&Other	3	E	ND
Publicly-controlled firms or undertakings are subject to an exclusion or exemption, either complete or partial, from the application of the general competition law	DR&Other	3	E	ND
Minimum capital requirements	DR&Other	3	E	ND
Exemption of road freight carrier's agreements from competition law	DR&Other	All	O	ND
Retail prices of road freight services are regulated	DR&Other	All	O	ND
The government provides pricing guidelines for road freight companies	DR&Other	All	O	ND
Freight carriers are required to file tariffs	DR&Other	All	O	ND
Industry representatives are involved in setting entry and pricing regulations	DR&Other	All	O	ND
Regulatory transparency				
Regulations are published or otherwise communicated to the public prior to entry into force	DR&Other	All	O	ND
There is a public comment procedures open to interested persons, including foreign suppliers	DR&Other	All	O	ND
Range of visa processing time	DR&Other	4	O	ND
Time to complete all official procedures required to register a company	DR&Other	3	O	ND
Total cost to complete all official procedures required to register a company	DR&Other	3	O	ND
Number of official procedures required to register a company	DR&Other	3	O	ND
Time taken for customs clearance	DR&Other	All	O	ND

Rail freight transport services

Measures	MA&NT/ DR&Other	Mode	Establishment/ operations	Discr./ non- discr.
<i>Restrictions on foreign entry</i>				
Foreign equity restrictions: maximum foreign equity share allowed (%)	MA&NT	3	E	D
There are statutory or other legal limits to the number or proportion of shares that can be acquired by foreign investors in firms that are controlled by national state or provincial governments	MA&NT	3	E	D
Foreign companies can establish branches	MA&NT	3	E	D
Only joint ventures are allowed	MA&NT	3	E	D
Foreign companies can establish subsidiaries	MA&NT	3	E	D
Board of directors: majority must be nationals	MA&NT	3	O	D
Board of directors: majority must be residents	MA&NT	3	O	D
Board of directors: at least one must be national	MA&NT	3	O	D
Board of directors: at least one must be resident	MA&NT	3	O	D
Manager must be national	MA&NT	3	O	D
Screening: Foreign investors must show net economic benefits	MA&NT	3	O	D
Screening: Approval unless contrary to national interest	MA&NT	3	E	D
Screening: Notification	MA&NT	3	E	D
Restrictions on the type of shares or bonds held by foreign investors	MA&NT	3	E	D
Conditions on subsequent transfer of capital and investments	MA&NT	3	E	D
Restrictions on cross-border mergers and acquisitions	MA&NT	3	E	D
Services are reserved for statutory monopoly or granted through concessions on an exclusive basis	MA&NT	3	E	ND
Licenses are subject to quotas	MA&NT	3	E	D
Licenses subject to economic needs tests	MA&NT	3	E	D
Commercial presence required in order to provide rail freight transport	MA&NT	1	E	D
Transit rights for international rail transport	MA&NT	1	E	D
Access rights for international combined transport	MA&NT	1	E	D
Access rights for international rail transport	MA&NT	1	E	D
Access rights for rail transport (cabotage)	MA&NT	1	E	D
<i>Restrictions to movement of people</i>				
Quotas: intra-corporate transferees	MA&NT	4	O	D
Quotas: contractual services suppliers	MA&NT	4	E	D
Quotas: independent services suppliers	MA&NT	4	E	D
Labour market tests: intra-corporate transferees	MA&NT	4	O	D
Labour market tests: contractual services suppliers	MA&NT	4	E	D
Labour market tests: independent services suppliers	MA&NT	4	E	D
Limitation on duration of stay for intra-corporate transferees	MA&NT	4	O	D
Limitation on duration of stay for contractual services suppliers is limited	MA&NT	4	E	D
Limitation on duration of stay for independent services suppliers is limited	MA&NT	4	E	D
<i>Other discriminatory measures</i>				
Foreign suppliers are treated less favourably regarding taxes and eligibility to subsidies	MA&NT	All	O	D

Measures	MA&NT/ DR&Other	Mode	Establishment/ operations	Discr./ non- discr.
Explicit discrimination in favour of local firms	DR&Other	All	O	D
The procurement process affects the conditions of competition in favour of local firms	DR&Other	All	O	D
Discriminatory criteria for issuing licenses	MA&NT	3	E	D
Interoperability/interlinking is required	DR&Other	1	O	ND
Barriers to competition				
When appeal procedures are available in domestic regulatory systems, they are open to affected or interested foreign parties as well	MA&NT	3	O	D
Foreign firms have redress when business practices are perceived to restrict competition in a given market	MA&NT	3	O	D
National, state or provincial government control at least one major firm in the sector	DR&Other	3	E	ND
Publicly-controlled firms or undertakings are subject to an exclusion or exemption, either complete or partial, from the application of the general competition law	DR&Other	3	E	ND
Minimum capital requirements	DR&Other	3	E	ND
The government can overrule the decision of the railways regulator	DR&Other	3	O	ND
Contracts for universal service obligations are awarded through competitive bidding	DR&Other	3	O	ND
<i>Memo: Vertical separation is required*</i>				
VS: Decisions of the infrastructure manager can be appealed	DR&Other	3	O	ND
VS: Independence of infrastructure managers is required	DR&Other	3	O	ND
VS: There is a prohibition to transfer public funds between services and infrastructure management activities	DR&Other	3	O	ND
VS: Access to railway infrastructure is mandated at the national level	DR&Other	3	O	ND
VS: Access fees are regulated	DR&Other	3	O	ND
VS: Access fees and conditions are developed and made public in advance	DR&Other	3	O	ND
VS: Access capacity is regulated	DR&Other	3	O	ND
VS: Transfer or trading of infrastructure capacity is prohibited	DR&Other	3	O	ND
VS: Track access for supply of services to terminals is mandated	DR&Other	3	O	ND
VS: Track access for supply of services to ports is mandated	DR&Other	3	O	ND
VI: Competitive entry/exit is allowed	DR&Other	3	O	ND
VI: Level of service obligations are imposed	DR&Other	3	O	ND
VI: Rail rates are regulated	DR&Other	3	O	ND
VI: Publication and filing of rail rates is required	DR&Other	3	O	ND
VI: Confidential contracts are allowed	DR&Other	3	O	ND
VI: A dispute resolution mechanism is available	DR&Other	3	O	ND
VI: Terminal running rights are in place	DR&Other	3	O	ND
VI: Rates for terminal running rights are regulated	DR&Other	3	O	ND
VI: Interswitching is mandated	DR&Other	3	O	ND
VI: Interswitching rates are regulated	DR&Other	3	O	ND
VI: Bottleneck services are regulated	DR&Other	3	O	ND
VI: Running rights are mandated	DR&Other	3	O	ND
VI: Running rights are mandated only for bottleneck segments	DR&Other	3	O	ND

Measures	MA&NT/ DR&Other	Mode	Establishment/ operations	Discr./ non- discr.
VI: Memo: there is market dominance				
Regulatory transparency				
Regulations are published or otherwise communicated to the public prior to entry into force	DR&Other	All	O	ND
There is a public comment procedure open to interested persons, including foreign suppliers	DR&Other	All	O	ND
Range of visa processing time (days)	DR&Other	4	O	ND
Time to complete all official procedures required to register a company (in calendar days)	DR&Other	3	O	ND
Total cost to complete all official procedures required to register a company (in USD)	DR&Other	3	O	ND
Number of official procedures required to register a company	DR&Other	3	O	ND
Time taken for customs clearance	DR&Other	All	O	ND

Courier services (including postal services)

Measures	MA&NT/ DR&Other	Mode	Establishment/ operations	Discr./ non- discr.
<i>Restrictions on foreign entry</i>				
Maximum foreign equity share allowed (%)	MA&NT	3	E	D
Non-residents are allowed to invest in local courier services firms through minority shares in local investment companies. Maximum foreign ownership in local investment companies (%).	MA&NT	3	E	D
There are statutory or other legal limits to the number or proportion of shares that can be acquired by foreign investors in firms that are controlled by national state or provincial governments	MA&NT	3	E	D
Legal form: only joint ventures are allowed	MA&NT	3	E	D
Board of directors: majority must be nationals	MA&NT	3	O	D
Board of directors: majority must be residents	MA&NT	3	O	D
Board of directors: at least one must be national	MA&NT	3	O	D
Board of directors: at least one must be resident	MA&NT	3	O	D
Manager must be national	MA&NT	3	O	D
Manager must be resident	MA&NT	3	O	D
Screening: foreign investors must show net economic benefits	MA&NT	3	E	D
Screening: approval unless contrary to national interest	MA&NT	3	E	D
Screening: notification	MA&NT	3	E	D
Restrictions on the type of shares or bonds held by foreign investors	MA&NT	3	E	D
Conditions on subsequent transfer of capital and investments	MA&NT	3	E	D
Restrictions on cross-border mergers and acquisitions	MA&NT	3	E	D
Monopoly on letters (kg)	MA&NT	3	E	ND
Monopoly on parcels (kg)	MA&NT	3	E	ND
Monopoly on express delivery (kg)	MA&NT	3	E	ND
The number of available licences for courier firms is limited	MA&NT	3	E	ND
Licences are subject to an economic needs test	MA&NT	3	E	ND
Restrictions on foreign owned firms' establishments	MA&NT	3	E	D
<i>Restrictions to movement of people</i>				
Quotas: intra-corporate transferees	MA&NT	4	O	D
Quotas: contractual services suppliers	MA&NT	4	E	D
Quotas: independent services suppliers	MA&NT	4	E	D
Labour market tests: intra-corporate transferees	MA&NT	4	O	D
Labour market tests: contractual services suppliers	MA&NT	4	E	D
Labour market tests: independent services suppliers	MA&NT	4	E	D
Limitation on duration of stay for intra-corporate transferees	MA&NT	4	O	D
Limitation on duration of stay for contractual services suppliers is limited	MA&NT	4	E	D
Limitation on duration of stay for independent services suppliers is limited	MA&NT	4	E	D
<i>Other discriminatory measures</i>				
Foreign suppliers are treated less favourably regarding taxes and eligibility to subsidies	MA&NT	All	O	D
Explicit discrimination in favour of local firms	DR&Other	All	O	D

Measures	MA&NT/ DR&Other	Mode	Establishment/ operations	Discr./ non- discr.
The procurement process affects the conditions of competition in favour of local firms	DR&Other	All	O	D
There is a formal requirement that regulators consider comparable international standards and rules before setting new domestic standards	DR&Other	All	O	ND
Barriers to competition				
When appeal procedures are available in domestic regulatory systems, they are open to affected or interested foreign parties as well.	MA&NT	3	O	D
Foreign firms have redress when business practices are perceived to restrict competition in a given market	MA&NT	3	O	D
National, state or provincial government control at least one major firm in the sector	DR&Other	3	E	ND
Publicly-controlled firms or undertakings are subject to an exclusion or exemption, either complete or partial, from the application of the general competition law.	DR&Other	3	E	ND
Minimum capital requirements	DR&Other	3	E	ND
The government can overrule the decision of the regulator	DR&Other	3	O	ND
The legal separation of the regulator and services operators is required	DR&Other	3	O	ND
The designated postal operator obtains preferential tax or subsidy treatment	DR&Other	All	O	ND
The designated postal operators obtains preferential treatment during customs clearance procedures	DR&Other	All	O	ND
The designated postal operator obtains exemptions from transport bans	DR&Other	All	O	ND
Prices for postal services are regulated	DR&Other	All	O	ND
Accounting separation is required	DR&Other	All	O	ND
An appropriate cost allocation system is in place	DR&Other	All	O	ND
Access to the postal network is granted on a non-discriminatory basis	DR&Other	All	O	ND
Restrictions on ground-handling	DR&Other	All	O	ND
Restrictions on cargo-handling	DR&Other	All	O	ND
Restrictions on storage and warehouses	DR&Other	All	O	ND
Quality/performance standards requirements for courier services outside universal services	DR&Other	All	O	ND
A dispute resolution mechanism is available	DR&Other	All	O	ND
The decision by the regulator can be appealed	DR&Other	3	O	ND
Regulatory transparency				
Regulations are published or otherwise communicated to the public prior to entry into force	DR&Other	All	O	ND
There is a public comment procedure open to interested persons, including foreign suppliers	DR&Other	All	O	ND
Range of visa processing time (days)	DR&Other	4	O	ND
Time to complete all official procedures required to register a company (in calendar days)	DR&Other	3	O	ND
Total cost to complete all official procedures required to register a company (in USD)	DR&Other	3	O	ND

Measures	MA&NT/ DR&Other	Mode	Establishment/ operations	Discr./ non- discr.
Number of official procedures required to register a company	DR&Other	3	O	ND
Time taken between the submission of an accepted customs declaration and customs clearance (days)	DR&Other	All	O	ND
Pre-arrival processing is possible	DR&Other	All	O	ND
A <i>de minimis</i> regime is in place (in USD)	DR&Other	All	O	ND
The release of goods is possible before determination and payment of duties	DR&Other	All	O	ND
The scope of the monopoly (reserved area) of the designated postal operator is clearly defined on the basis of objective criteria	DR&Other	3	O	ND
The licensing/authorizing process and appeals process are transparent and are based on objective criteria	DR&Other	3	O	ND
Fees required to obtain a licence/authorisation (in USD)	DR&Other	3	O	ND