COMPETITION POLICY IN THE DIGITAL AGE

Case Studies from Asia and Sub-Saharan Africa

2016

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About this booklet

This booklet is for you if you have an interest in competition policy in the digital communications sector. There are chapters on Sub-Saharan Africa and Asia, so this booklet is for you specifically, if you are considering aspects of competition law and regulation in these regions. You are:

- **A lawmaker.** There is a need to consider the balance between sectoral regulation and competition law. The evidence presented in this booklet points overwhelmingly to the benefits (for the economy as a whole) brought about by enactment of a modern competition law, properly enforced by a well-resourced competition authority. More resources should therefore be allocated to competition authorities, and the balance with the sectoral regulator(s) reconsidered. The demarcation of the jurisdiction between the two agencies should be better understood and clarified, if necessary. This should be done both at the national level and in supra-national organisations.
- **An enforcer of regulation**, with or without concurrent competition law powers, who wants to understand how to regulate the telecoms sector in the digital economy, taking into account what competition law enforcers can do.
- **An enforcer of competition law** who wants to consider more deeply the interplay with sectoral regulation and gain a better understanding of the dynamics in the digital economy, where, due to historical reasons, some players are regulated and others are not. Enforcers of regulation and competition law who want to understand and improve the coordination between their respective areas. Collaboration between the agencies is important, both at the national level and in the supra-national context.

Acknowledgments

This booklet could not have been drafted without the help and cooperation of many contributors both from operators and industry players and internally.

Within the GSMA, special thanks go to Kalvin Bahia, David Darwin, Arran Riddle, Serafino Abate and Brett Tarnutzer. In this booklet, care has been taken to be as accurate as possible but all information is taken from publicly available resources which may not be accurate in all cases. The GSMA intends to update this case studies booklet regularly. Please send all comments to comphandbook@gsma.com

PDF Navigation Instructions

This booklet is intended as a reference, and is a companion to the GSMA Competition Policy Handbook. Following the review of the case studies, we have identified five main features of best practice in competition policy that are fundamental to a proper consideration of the issues that arise in the digital economy. We look at Sub-Saharan Africa and Asia to see whether these features are present in the geographies considered. We develop recommendations for policymakers and agencies that are responsible for devising and applying competition policy in the digital age.

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There are examples of more converged regulators for telecommunications and media in Hong Kong, Malaysia and soon Singapore – no regulatory regime applies to the players of the digital age in their entirety. This focus on regulating the telecoms sector is historical. As an example, regulation is required due to the link between WTO trade agreements and telecoms liberalisation and regulation, as described above (see The International Dimension in the introductory chapters).

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Foreword

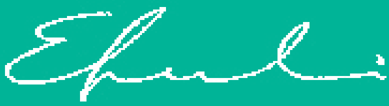
This booklet is intended as a companion resource to the GSMA Competition Policy Handbook. Existing regulators and competition authorities have the task of enforcing competition policy. They can do a lot to ensure that regulation is only imposed where necessary, recognising that the application of competition law is best suited to the converged digital economy. A careful market appraisal, taking into account all products and services that are substitutable, leads to a market assessment in which all competitive forces are properly considered and therefore in which operators may, in fact, not enjoy a position of market dominance (in competition law) or significant market power (in regulation). For example, if at the retail level consumers can switch to 'free' messaging apps in response to an increase in price of SMS, then no operator can increase the price of SMS and therefore operators do not have significant market power. So too, in the world of internet platforms, it is important to define a multi-sided market in order to arrive at a proper assessment of the competition dynamics in that market.

There is obvious overlap between regulation of operators with significant market power and competition law enforcement. Competition law enforcement applies to all sectors and is a powerful tool for boosting productivity, innovation, competitiveness, and growth. Indeed, a recent report by the World Bank Group estimates that a proper enforcement of competition law has the potential to lift a significant amount of people out of poverty. One aspect that is perhaps less understood concerns the very fabric of the legal, policy and operational framework. If there is no special regulator for an industry, only the competition authority will be able to intervene. This is why issues that may arise in the IT sector, or in the internet provider sector are considered by the competition authority. This is why the cases against Microsoft in the 1990s were investigated by competition authorities. In the digital economy, this is why the existing cases against Google and Apple are pursued by competition authorities. Indeed, this is why cases in the pharmaceutical sector, or against chip manufacturers, supermarket or airlines, are carried out by competition authorities.

Therefore, competition principles need to be integrated between the different agencies that have the task to enforce them, in close cooperation between competition authorities and sectoral regulators. Because of the real risk of over-regulation, it is especially important to rely on competition law whenever possible and to regulate ex ante only when there is a clear case to do so. Because the digital economy is global, cross-border cooperation between competition authorities and regulators is necessary.

This only works if the legal and policy framework is in place; that is, if there is a competition authority in the country, and if the authority is properly set up and has the resources and expertise to operate. In this booklet, we review the situation in Asia and in Sub-Saharan Africa. Although in Asia there is a competition authority in all of the countries surveyed, bar one, the effectiveness of the authority varies greatly from country to country. In Sub-Saharan Africa, out of 50 countries surveyed, only 14 have a fully established competition authority. In all countries surveyed, there is regulation imposed on a sector: telecommunications (in some cases, telecommunications, media and broadcasting). Indeed, it is often a WTO requirement that countries implement a system of regulation of the telecommunications sector in order to gain access to international trade. There is no similar requirement to adopt a system of competition law. Not all telecommunications regulators apply regulation on operators with market power, after an assessment of market failures that require intervention.

In both Sub-Saharan Africa and in Asia, cross-border cooperation has improved in recent times. Common Market for Eastern and Southern Africa (COMESA) in Southern Africa is active as a supra-national competition authority in merger-control cases and is expanding its remit. The Association of Southern Asian Nations (ASEAN) in Southeast Asia is in the process of setting up its own frameworks. This is to be welcomed, although if the jurisdiction of supra-national bodies is not properly codified, instead of leading to a much-needed one-stop shop, it can lead to extra layers of bureaucracy and the risk of businesses facing multiple agencies, at the supra-national level and nationally. However, cooperation spreads knowledge and best practice and minimises the risks of diverging decisions and practices among agencies, between countries, making it easier for the market players to operate with legal certainty across borders.



Emanuela Lecchi, Head of Competition (Legal), GSMA

14 December 2016

Summary

This booklet has been produced in answer to questions posed by users of the Competition Policy Handbook[1], asking that the key concepts in the Handbook should be put into context in the realities that they face. A main principle that should apply in competition policy enforcement is that sectoral telecoms regulators should only regulate where competition law is not sufficient to deal with the issues identified, and then only in a proportionate, non-discriminatory manner. If the regulators follow this principle, then many issues that arise in the application of competition policy in the digital age become less pressing: operators in the sector should not then be over-regulated, and should face a more level playing field with their competitors, the internet players. Until then, telecommunications operators will continue to face a non-level playing field. It is sufficient to consider the number of countries surveyed in this booklet where competition laws are not properly functioning but where there is a system of regulation that applies to the telecommunications sector (sometimes to telecommunications, media and broadcasting)[2] to see the truth of this statement. Especially if the regulators should impose regulation without a proper understanding of the competitive forces that shape the economy, then the telecommunications operators will be subject to national regulation, different in every country, whereas their competitors in the digital economy will not. In the absence of generally applicable competition laws, their competitors in the digital economy may escape scrutiny altogether.

One of the main characteristics of the digital economy is its globalisation (which affects not just telecommunications markets). If the markets are global, or at least "widely transnational",[3] there is a need for a global, or at least a widely regional response, so that the above main principle should apply in a supra-national context too. Failure to grasp the supra-national aspects impairs the benefits of the digital economy when operators are potentially subject to a plethora of laws applied by different agencies, leading to risks to cross-border investment.

The main principle above, that regulators should only regulate when competition law cannot deal with the issues identified, can only apply if in the countries in question there is a properly functioning legal and policy framework that makes this possible. In particular, it can only apply if there is a competition law, and if the competition law is at least capable of addressing the issues. It can only apply if the regulators are sufficiently aware that their powers need to be exercised with caution, mindful of the risks of over-regulation, as more particularly discussed below. None of this is new: Already in 2006, the International Competition Network identified the need for a system of competition law and sector-specific regulation that would be transparent, effective and enforceable and, above all, coordinated. This is discussed in Figure 8, here.

By way of background, competition law and economics regulation overlap, and they each have specific characteristics, as follows.

1. GSMA Competition Policy in the Digital Age: A practical handbook, 2015, available at: http://www.gsma.com/competition-policy-handbook
2. In all countries considered there is a sectoral regulator
3. Maher M. Dubbah, *International and Comparative Competition Law,* Cambridge University Press, 2010, page 115

Figure 1: Competition law and sector-specific regulation

Competition Law	Sector-Specific Regulation
• Applies to all sectors of the economy • The starting point of investigation often is a complaint against a specific action • Leads to imposition of fines and tailored measures to address specific issues (deterrent effect) • Competition authorities have more wide-ranging powers to conduct investigations and to impose fines	• Applies to specific sectors (telecom) only • The starting point is often a predetermined list of markets • Leads to the adoption of regulation that should be reviewed regularly • Regulators have less wide-ranging powers of investigation and enforcement, limited to the sector

Following the review of the legal and policy framework in the Asian and Sub-Saharan African realities in this booklet, we conclude that the following five features are a precondition of 'best practice' in competition policy. When we refer to a 'properly functioning' agency, we mean an agency that is independent of government, properly staffed and resourced.

Figure 2: Five features of best practice in competition policy

1. A **properly functioning competition authority** and a **properly functioning regulator**, i.e., that are independent of government, properly staffed and resourced.

2. Economic regulation must address **market failures**, based on evidence from up-to-date market reviews. Regulators must be clear about the reasons for, and impact of, regulation in all cases.

3. Ideally, **competition law should be enforced by a competition authority**. If the regulator has **sectoral competition law powers**, the need for cooperation between agencies is greatest.

4. Both competition authority and regulator understand **the interplay** between their respective jurisdictions and **work together** to address the issues identified.

5. There is appropriate, **meaningful cooperation** between competition authorities and regulators at the supranational level too.

In the summaries in each of the Asia and Sub-Saharan Africa chapters, each of these features is analysed in the specific context of the realities on the ground. In a nutshell, as can be seen here, advanced societies in Asia tend to have adopted the five features above and tend to approach regulation cautiously, mindful of the potential for over-regulation (*Feature 2*). Some Asian countries such as Australia, South Korea and Singapore are at the forefront of the application of the competition rules to the digital economy, as compared to anywhere in the world (*Feature 1*). There seems to be a movement towards exclusive application of the competition rules by the sectoral regulators in some countries, following the example of Singapore (*Feature 3*). If transition and emerging digital societies are considering the adoption of such a system, then policymakers need to be extra-mindful of the need for cooperation between the competition authority and the regulator (*Feature 4*). Cooperation at the supra-national level could be improved across Asia (*Feature 5*). The creation of the ASEAN Economic Community in 2015 possibly heralds a more cohesive approach cross-border in those Asian countries that belong to ASEAN.

As can be seen here, of the 50 countries surveyed in Sub Saharan Africa, 14 have an established system of competition law, with competition authorities active on average for eight years in the countries where they operate (*Feature 1*). Resourcing of the competition authority can be an issue, although the position has improved in recent years. South Africa has both an established and active competition authority and an established solid regulator.

The countries that belong to the West African Economic and Monetary Union (WAEMU) have adopted a centralised system of application of the competition rules, with mixed results. All African countries considered have active regulators but the regulators do not always seek to impose regulation after a proper market analysis, leading to potential distortions in the competitive landscape (*Feature 2*). The difference between competition law and regulation appears to be blurred in a number of countries (*Feature 3*), and this can impair a proper understanding of the respective roles of the competition authority and the regulator, although in five countries the agencies themselves have entered into MoUs, to address concerns (*Feature 4*). Sub-Saharan Africa is at the forefront of supra-national cooperation in competition law enforcement (*Feature 5*), with the COMESA Competition Commission on its way to becoming an effective enforcer. Supra-national cooperation of this kind has the potential to lead to better outcomes for the economy as a whole, by ensuring that there is alignment of the decisions taken at the national level and that the system can, over time, evolve towards a one-stop shop for, e.g. merger control. The example of COMESA also puts into sharp focus the need for clarity when setting up supra-national enforcers of the competition rules.

In light of the results of the analysis, policymakers on the one hand and agencies that enforce the rules on the other hand should adopt the following recommendations.

Figure 3: Recommendations for policymakers and agencies

POLICYMAKERS — NATIONAL	POLICYMAKERS — SUPRA-NATIONAL
• When assessing the need for change to a regime, consider the interplay between competition law and regulation. Can the legislative framework be clarified as to the respective roles? This is especially important for merger control. • If there is no properly functioning competition authority, consider introducing it. • When allocating resources, consider the wider impact that a competition authority can have on the economy. Ensure fair allocation between the regulator and competition authority.	• Consider how existing supra-national bodies can be more effective in the way competition law and regulation is applied in cross-border cases. • If setting up a cross-border competition authority, consider how it will operate in conjunction with the national agencies. What are the boundaries of the respective jurisdiction? How will the supra-national body carry out investigations? What enforcement tools are available? • Consider the interplay between competition law and regulation at the supra-national level too.
REGULATORS AND COMPETITION AUTHORITIES — NATIONAL	**REGULATORS AND COMPETITION AUTHORITIES — SUPRA-NATIONAL**
• If the legal system is silent, consider informal MoUs to decide how to organise cooperation. • Consider secondments of employees between agencies. • Always assess whether an issue should be more properly addressed by competition law rather than regulation. • Cooperate on market assessment for regulation. • If there is no competition authority, the regulator must be even more vigilant against the risk of over-regulation.	• Recognise that existing supra-national organisations have the potential to extend beyond their current field of action of capacity building, best practice and know-how, for cooperation and consistent cross-border decisions. • Consider how best to use resources across borders to avoid duplication and to increase efficiency. Action that would lead to quicker adoption of decisions by the agencies, and decisions that are aligned in the different countries would greatly help the business community.

Introduction

Telecommunications connectivity and pricing of telecommunications services are undoubtedly important for the development of countries. However, the digital economy requires an approach that takes into account the different facets of 'connecting people', such as availability of devices and locally relevant content. The existence of a regulatory regime that encourages change and supports innovation underpins much of the effort to bring about digitisation, especially in developing countries. Reliance on competition law rather than regulation (when appropriate) would help to create the conditions for continued expansion of networks and affordable services.

The majority of examples in the Competition Policy Handbook are from the European context. Taking into account the feedback received, in this case study booklet we seek to expand on the conclusions in the handbook; provide worked examples in flowchart format about how significant market power (SMP) regulation is carried out (Appendix 2); and clarify the relationship between spectrum assignment and competition policy (Appendix 1). We put the spotlight on Asia and Sub-Saharan Africa. The two regions are different and within each region there are stark variations amongst the degree of developments of digital societies. Common characteristics can be found in both, however. One such is that fixed network infrastructure tends to be underdeveloped, on average, across both regions: mobile technology is the main access technology.

As a corollary, both in Asia and in Sub-Saharan Africa, regulatory intervention is often directed at mobile operators.[4] This is a key difference with the European Union, where most regulation affects fixed operators (although even in the EU, a number of legal obligations are imposed on the mobile industry without a market assessment (such as roaming and net neutrality rules).

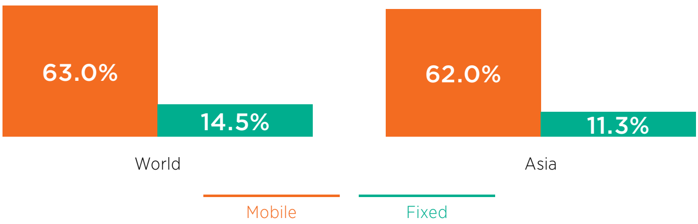
In terms of fixed-line penetration:

Across Sub-Saharan Africa, fixed-line penetration stood at only 0.3% in 2012, the lowest of any region. Where fixed-line networks do exist, they tend also to be relatively expensive.[5]

Across Asia, fixed-line penetration stood at 11.3% in 2015, as shown in Figure 6.

4. This is Interesting. The main justification for imposing regulation on the telecoms industry is that, on liberalisation, the main incumbent fixed operator would receive the telecoms network that had been usually built with expenditure of public money. The fixed operator was effectively 'gifted' a telecoms network, and therefore should be subject to extra regulation. In the context of countries where fixed penetration is low, this justification does not hold true – yet, the mobile operators are subject to sector-specific regulation similar to that imposed on fixed operators, despite the investments made by them in the mobile networks.
5. GSMA Mobile Economy Report Sub-Saharan Africa, 2014, available at: http://www.gsma.com/mobileeconomy/archive/GSMA_ME_SubSaharanAfrica_2014.pdf, page 29

Figure 4: Mobile vs fixed-line penetration (world and Asia) 2015[6] (NB: in Sub-Saharan Africa, fixed-line penetration was only 0.3% in 2012)



Source: GSMA Intelligence, ITU

Both Asia and Sub-Saharan Africa include countries that are among the poorest in the world: lack of connectivity and a perceived relatively high price of telecommunications services are often considered a barrier to their development generally.

However, lack of connectivity needs to be understood against the background of the weak business case for rural network roll-out: low ARPU levels make it hard to justify the costs of deployment and maintenance in rural areas. Although there are about 4 billion people around the world who still do not have access to the internet,[7] mobile operators already provide access to the internet at a rate of nearly one million new customers every day, with 90% of the growth coming from developing markets.

We currently live in a world in which more Africans have access to a mobile phone than to any other utility or infrastructure service.[8]

Furthermore, it is an interesting fact that more than 2 billion people in the world live within the footprint of broadband-capable mobile networks but have yet to access the internet. Unlocking demand among this population group involves a different set of challenges — ensuring that mobile devices and services are not taxed as luxury goods, helping people gain the digital skills needed to understand how to use the internet and facilitating the development of online content and services that are localised and relevant. The GSMA is actively working with operators on initiatives across affordability, digital literacy and online content to help empower individuals to get online. Indeed, in February 2016 the mobile industry became the first sector to commit to the 17 United Nations Sustainable Development Goals.[9] Whether it is ensuring healthy lives and promoting

6. GSMA Advancing Digital Societies in Asia, 2016, available at: http://www.gsma.com/newsroom/press-release/new-gsma-study-tracks-digital-society-progress-asia/, page 14
7. http://www.gsma.com/newsroom/blog/connecting-the-unconnected-unlocking-human-potential-through-the-power-of-the-mobile-internet/
8. World Bank, ITU, *Info*Dev, IFC, *Telecommunications Regulatory Toolkit*, 10th Anniversary edition, 2010: https://openknowledge.worldbank.org/bitstream/handle/10986/13277/74543.pdf?sequence=1, pp 31 and 32. This is a live resource, updated regularly. It draws extensively, but not exclusively, on the seven modules of the ICT Regulation Toolkit, available at www.ictregulationtoolkit.org.
9. These are: (1) no poverty; (2) zero hunger; (3) good health and well-being; (4) quality education; (5) gender equality; (6) clean water and sanitation; (7) affordable and clean energy; (8) decent work and economic growth; (9) industry, innovation and infrastructure; (10) reduced inequalities; (11) sustainable cities and communities; (12) responsible consumption and production; (13) climate action; (14) life below water; (15) life on land; (16) peace, justice and strong institutions; (17) partnerships for the goals.

well-being for all; achieving gender equality and empowering women and girls; making cities and settlements inclusive, safe, resilient and sustainable; or helping to combat climate change; mobile networks are transforming the world and are a revolutionary force for positive change.[10] Achieving the goal of reducing barriers to take up can only be done by a joint effort of the mobile industry, governments and regulators, and people on the ground. Appropriate, non-discriminatory and proportionate regulation of the mobile industry and appropriate scrutiny of all players in the digital economy under competition law are necessary for the achievement of these goals.

The system of regulation and competition law has an important role to play. As the Telecommunications Regulatory Toolkit[11] recognises,

"Regulation is not a panacea. While it may address market power concerns, regulation comes with costs. Where it is possible, effective competition will generally deliver better outcomes than regulation.

Where regulation is necessary, regulatory forbearance is the key to good outcomes. Regulatory forbearance is about focusing regulation to where it is needed, and withdrawing regulation in those parts of the market where it is no longer necessary. In other words, the concept of regulatory forbearance rests on the goal of a gradual removal of ex ante regulation and an accompanying increase in the use of general ex post competition regulation."

We endorse these statements. Government and regulatory intervention, even when well-intended, can have a distortionary effect.[12] Distortive intervention includes:

- arbitrary and opaque rules that do not allow for transparency;
- rules that discriminate in favour of home-grown companies, or state-owned companies;
- rules that effectively discriminate against one sector;
- application of blanket provisions imposing excessive and unrealistic goals for quality of service, leading to uniform provision of services and extra costs;
- imposition of rules restricting freedom to innovate in the provision of service, irrespective of the market power of the addressees (e.g., rules against bundling; or price controls imposed on companies that do not have market power, in the absence of a market assessment properly carried out).

10. See *2016 Mobile Industry Impact Report: Sustainable Development Goals*, September 2016, available at: http://www.gsma.com/newsroom/press-release/gsma-publishes-report-detailing-mobile-industrys-impact-achieving-sdgs/
11. *Telecommunications Regulatory Toolkit*, 10th Anniversary edition, quoted, pp 31 and 32.
12. World Bank Group, *Breaking down Barriers – unlocking Africa's potential through Vigorous Competition Policy* (WBG African Competition Policy Report), available at: http://documents.worldbank.org/curated/en/243171467232051787/pdf/106717-REVISED-PUBLIC-Africa-Competition-Report-FINAL.pdf , page 108

Competition policy enforcement should involve proper consideration of the potential that competition law has to deal with issues that arise in the context of market players with market power. This can only happen if the legal, policy and operational frameworks that make this possible are in place. Although the situation has improved recently, unfortunately in a number of countries across Asia and Sub-Saharan Africa the frameworks are not properly operational yet.

Policymakers have the power to ensure that the sectoral focus of regulation and competition law is lifted, and competition law becomes generally applicable. Attributing resources to the application of competition law across all sectors of the economy has been demonstrated to have profound effects for welfare gains, with the lowest income population benefiting the most. Figure 5 provides an overview of studies that show the positive effects of removing policy and regulatory obstacles to competition.[13] If the decision is taken to attribute resources to the sectoral regulators in preference to the competition authority, these welfare effects cannot materialise across the economy.

Figure 05: Effect of competition on welfare for the economy as a whole

Country	Study	Reform / Impact of...	Effect
Welfare effects of limited competition			
Mexico	Urzia (2013)	High market power for seven markets, including: food, beverages and medicines	Welfare loss 19.8% higher for lowest income decile than for highest in urban areas 22.7% higher in rural areas
Australia	Creedy and Dixon (1998)	Monopoly power for 14 commodity groups	Welfare loss 45% higher for lower income decile than for highest
Effects of competition law enforcement: elimination of anticompetitive business practices			
International	Connor (2014)	Cartel (sample of 1,530 cartel episodes across sectors and countries)	Median average overcharge of 23%; mean of 49%. 60% of cartel episodes with overcharges of 20% or higher have a mean overcharge of 79.7%
South Africa	Mncube (2013)	Cartel (wheat flour)	Overcharge to independent bakeries of 7-42%

Source: T Bengazo, S. Nyman, quoted (footnote 13)

13. T. Bengazo and S. Nyman, *How Competition affects the Distribution of Welfare*, World Bank Group, at: http://documents.worldbank.org/curated/en/662481468180536669/pdf/104736-REPF-Competition-and-Poverty.pdf

Figure 5 (continued): Effect of competition on welfare for the economy as a whole

Country	Study	Reform / Impact of...	Effect
Effect of removing policy and regulatory obstacles to competition			
Kenya	Argent and Begazo (2015)	Reducing barriers to competition leading to a 20% fall in the price of I) maize and ii) sugar	I) Effect equivalent to 1.2% increase in real income with greater gains for the poor, 1.8% fall in poverty ; ii) Welfare gains for the poorest income decile 4.4 times higher than for the highest 1.5% fall in poverty
Dominican Republic	Busso and Galiani (2015)	Entry of new grocery stores into a conditional cash transfer program	1% increase in number of stores operating in the market reduces prices by 0.06% without affecting product or service quality
United States	Hausman and Leibtag (2007)	Entry and expansion of retail supercenters	Welfare gains from direct increase of variety is about 20% of average food expenditure, indirect price effect of 5%. Lower income households benefit by 50% more than average effect
Mexico	Atkin, Faber and Gonzalez-Navarro (2015)	Foreign supermarket entry	Significant welfare gains for average household (6.2% of household income), driven by direct consumer gains from new foreign stores with cheaper prices, richest income groups gain about 50% more than the poorest

Source: T Bengazo, S. Nyman, quoted (footnote 13)

Policymakers can also ensure that regulatory intervention adheres to common guiding principles, so as to minimise the risks of distortionary effects. Even in the absence of changes to the legal system, regulators themselves can already apply regulation in a way that minimises distortions, by considering the effects that the remedies they seek to impose have on competition.

If it makes sense for competition law and regulation to be applicable in a cross-border, supra-national context, then it makes sense to consider the role of supra-national organisations. Perhaps surprisingly, the WTO does not have a framework for the application of competition law. Perhaps not surprisingly, however, given the focus on sectoral regulation in most countries, the WTO has a so-called *Reference Paper* that obliges the signatories to introduce regulation in the telecommunications sector, narrowly intended. On the other hand, both in Asia and in Sub-Saharan Africa, there are a number of supra-national organisations with at least some competition law remit. This is a welcome development, but it creates its own challenges in terms of drawing the jurisdictional boundaries between the various authorities.

Overall, the conclusions already reached in the Competition Policy Handbook are confirmed in this case study booklet. Telecoms operators are subject to a lot more scrutiny and more regulation than their competitors in the digital economy. Indeed, since publication of the Competition Policy Handbook, the trend towards increased regulation of the telecommunications sector continues unabated. Regulation is often imposed without regard to whether the operators in question have any market power. The recent renewed attempt to impose *ex ante* regulation in the name of net neutrality is a worrying trend. The imposition of regulation indiscriminately, without a proper analysis of the marketplace in which the entities to be regulated operate can lead to over-regulation (Type I errors). Regulators and policymakers need to be aware that inflexible net neutrality regulation has important implications for the way in which mobile operators compete now, will be able to compete in the future and, crucially, will be able to deliver the next technological developments, in 5G.[14]

What applies to telcos should also apply to the internet operators of the digital economy, in the markets in which they compete. The all-important question of taxation of the internet players is outside the scope of this booklet. As a general observation, it would seem only fair that internet players should pay taxes in accordance with the revenue that they earn in a particular jurisdiction. Achieving this aim would be difficult and possibly would require a great degree of supra-national cooperation.

Leaving aside the taxation issues, in terms of strict competition policy, and notwithstanding various calls for subjecting internet players to extra regulation, any obligations should only be imposed on them where necessary, after a proper assessment. The same principles must apply to the telecoms operators: regulators should refrain from regulating where competition law is sufficient to deal with the issues. This is a clear principle in SMP regulation, the third question in the so-called Three Criteria Test in the European regulatory framework, but too often this is not properly considered by regulators.

This is not to say that competition policy is perfect as is. The issues identified in the Competition Policy Handbook with regard to competition policy enforcement need to be addressed. The GSMA has published two further studies aimed at lawmakers, seeking to identify the best way regulation could be adapted to reflect the realities of the digital economy.

In the first study,[15] the GSMA concluded that policymaking must reflect the basic characteristics of the digital economy. Policymaking should seek to

- preserve dynamic efficiency and encourage innovation;
- take into account the presence of strong economies of scale and scope; and
- start from an understanding that consumers access modular services, based on technical innovation.

Regulation should therefore be based on the functionality of the services (rather than based on the infrastructure means of delivery, or the technology used), should be flexible and should take into account the realities on the ground.

The second study commissioned explores how policymakers could improve competition law and regulation in practice, to cope with the challenges posed by the digital age.[16] In it, the following key recommendations are made:

14. P. Alexiadis. *EU Net Neutrality policy and the mobile sector: The need for competition law standards,* Concurrences, September 2016, https://www.concurrences.com/review/issues/no-3-2016/articles/eu-net-neutrality-policy-and-the-mobile-sector-the-need-for-competition-law-80707
15. GSMA, NERA Economic Consulting, *A new regulatory framework for the digital ecosystem,* available at: http://www.gsma.com/publicpolicy/wp-content/uploads/2016/02/NERA_Full_Report.pdf
16. GSMA, CEG, *Resetting competition policy frameworks for the digital ecosystem,* available for download at http://www.gsma.com/publicpolicy/resetting-competition-policy-frameworks-for-the-digital-ecosystem.

Figure 6: Key recommendations on resetting competition policy for the digital age from the GSMA, CEG report quoted in footnote 16

Market definition and market power

1. Adjust existing tools to account for specific features of digital markets
2. Focus on actual substitution patterns
3. Use alternative tools to capture the main determinants of consumers' switching behaviour
4. Ensure market definition is sufficiently forward-looking, and revise and adapt policies to fully capture changes in the relevant market
5. Focus on alleged anticompetitive conduct and its likely effects rather than inferring market power from market structure
6. Assess the extent to which big data confers market power
7. Maintain a high threshold for intervention based on collective dominance

The total welfare standard

8. Adopt a total welfare standard to support long-term productivity growth and higher living standards
9. Focus on dynamic effects when assessing mergers and competition in digital markets
10. Use better tools to assess efficiencies

Ex ante and *ex post* regulation

11. Review the thresholds for ex ante regulation to ensure balance between regulation and investment risks
12. Focus ex ante regulation on enduring market power
13. Ensure regulation is streamlined and consistent with competition law

Institutional arrangements

14. Adopt interim measures to accelerate ex post enforcement and mitigate potential harm from anticompetitive conduct
15. Reassess institutional arrangements

Competition Policy in the Digital Economy

The digital economy requires adapted competition law enforcement, as seen in the Competition Policy Handbook. For the regulatory landscape to operate in a way that is conducive to embracing the digital economy, there needs to be a properly functioning competition authority and a properly functioning regulator. The two need to be aware of each other's powers and to cooperate. The regulator must understand the reasons why it regulates and the impact of regulation. Only when competition law is insufficient to deal with the issues identified should regulation be imposed.

The following table outlines the elements of effective implementation of competition policy (competition law and regulation). [17]

Figure 7: Elements of effective implementation of competition law

A. Legal and policy framework	B. Operational framework	C. Competition policy enforcement	D. Integration of competition principles
Competition policy (competition law and economics regulation)	Structure of the authority and regulator	Regulatory framework: competition guidelines and regulations	Collaboration between agencies and ministries within the government
Competition law	Staffing and financial resources for the authority	Case handling: analysis of anticompetitive practices and merger review	Opinions on relevant laws and regulations that are likely to harm competition
Economics regulation	Staffing and financial resources for the regulator	Market reviews: underpin SMP regulation and other interventions (including spectrum assignment)	Consider the interplay with competition law–Can this deal with the issues? If so, do not regulate.
Law that creates the competition authority and the regulator	Selection of board members and/or head of the agency	Implementation of the agency's powers	Market studies in sectors with competition concerns
Other relevant laws with competition mandates (such as public procurement)	Strategic planning	Administrative efficiency, procedural fairness and due process in case handling	Awareness raising and capacity building for the private sector, civil society, journalists, academia, public sector

17. Adapted from WBG African Competition Policy Report, quoted, Figure B-1. The changes have been made to bring into focus the relationship between the competition authority and the sectoral regulators. This table will also be published in the forthcoming WBG document, *Market and Competition Policy Assessment Toolkit*.

Taking these categories into account, overall the analysis in the Competition Policy Handbook proceeds from the assumption that, in any particular country:

- the legal and policy framework (A) and
- the operational framework (B)

are in place. Therefore, the assumption is that in the particular country there is a legal framework that comprises competition law and regulation (A), and that there is a sectoral regulator with a mandate to apply SMP regulation and a proper functioning competition authority (B).

Given A and B, the analysis in the Competition Policy Handbook focuses on the complexities of competition policy enforcement (C), considering specifically the enforcement of the rules on abuse of a dominant position and merger control, alongside the regulatory enforcement of obligations based on the analysis of operators with significant market power. It is not the intention here to give an in-depth summary of the Competition Policy Handbook. A high-level summary on page 28.[18] It is crucial in this system that regulators understand the need for a proper assessment in order to consider if competition law is sufficient to deal with the issues identified (test 3 in the so-called Three Criteria Test).

In this booklet, the focus will be on whether in the countries surveyed the legal and policy framework is in place (A); whether the operational framework is effective (B) and also the specifics of collaboration between agencies, at the national and at the supra-national levels (D).

- The features and recommendations identified in this booklet echo earlier findings. For example, already in 2006, the International Competition Network had issued a document whose main findings are summarised in Figure 8.[19] The development of the digital economy makes it all the more urgent to understand the issues and act accordingly.

18. The Competition Policy Handbook is available at http://www.gsma.com/publicpolicy/competition-policy-in-the-digital-age and can be accessed in English and in French. It is fully searchable and, in this booklet, care has been taken to cross refer to the relevant concepts in the Handbook when relevant.
19. ICN working group on Telecommunications Services; *The role for Competition in the Telecommunications Sector*, 2006. Available at: http://www.internationalcompetitionnetwork.org/uploads/library/doc384.pdf

Figure 8: Role of competition in the telecommunications sector, ICN (2006), quoted in footnote 19

Competition should be promoted by:

- ensuring that competition law applies to the telecommunications sector and that competition law provides effective instruments, including sanctions and remedies, for deterring anticompetitive conduct;
- ensuring that the powers and duties of the competition authority and sector-specific regulator are transparent;
- promoting co-ordination between the regulator and the competition authority to avoid conflicts involving any overlapping jurisdiction;
- ensuring that operators with market power or SMP do not have same licence obligations as the smaller operators (such as account separation, cost-orientation, non-discrimination, no cross-subsidisation, access/interconnection requirements);
- the regulatory frameworks should be clear on the obligations imposed on operators with market power or SMP. The conditions for the application of these obligations should also be clearly stated to ensure predictability, transparency and proportionality.

Enforcement – There is a need to:

- protect competition in the telecommunications sector by taking appropriate enforcement action against anticompetitive conduct;
- apply sound competition analysis (including relevant market definition, market power/dominance) and remedies;
- take into account technological changes that are occurring in the telecommunications industry and that may impact competitive analysis;
- build effective working relationships with the regulatory agencies and coordinate efforts in the review of particular matters, including with respect to emerging services based on new technology and innovation.

Transparency and effectiveness – There is a need for:

- expeditious decision making, as far as possible;
- removal of unjustified regulatory restrictions on competition in the provision of communications networks and services and in the usage of spectrum. With respect to entry, agencies should advocate that the regulatory framework set by jurisdictions for the provision of such networks and services is consistent with non-discrimination principles;
- regulating only in such a way as to create or maintain appropriate market incentives;
- forbearance from unnecessary regulation as soon as practicable, taking into account the availability of existing competition law to protect the interests of consumers, and the ability of existing competition laws effectively to remedy anticompetitive behaviour;
- periodic review of regulation to ensure that regulation continues to be appropriate and is not adversely affecting competition;
- technologically neutral regulation that does not favour one technology over another, create entry barriers for new technologies, or deter convergence of telecommunications services;
- when there is a need for social regulation, such as universal service, implement it in a competition-neutral manner.

In this section, we will refer back, first to the characteristics of the digital economy that make it important to reset the way that competition policy is applied in practice. Second, we will recap on the interplay and differences between competition law and regulation.

The way competition law applies to the economy as a whole, rather than to a sector narrowly intended, makes competition law ideally suited to consider issues related to abuse of market power and substantial lessening of competition in the digital economy. The pre-eminence of competition law is recognised in most systems of SMP regulation, and codified in the third question of the EU Three Criteria Test, which obliges a regulator to forebear from regulating if competition law is sufficient to deal with the issues identified. Where there is no competition law, then exhortations to rely on it instead of regulation cannot be put in practice. Even when competition law exists, sometimes there is no competition authority, or the competition authority is newly established and not yet experienced enough, or is not properly resourced. Regulators in almost all countries have had a head start, but their jurisdiction is too limited to deal with the issues that arise in the digital economy: cooperation between regulators and competition authorities secures a more level playing field between all actors in the digital economy.

The characteristics of the digital economy

Most governments want to bring about a digital revolution — to empower their citizens with new tools and to reap the benefits promised by the digital economy. In order to do so, connectivity is the starting point. Connectivity underpins the digital economy, but without access to locally relevant content and in the presence of citizens who are not digitally literate, or cannot afford the appropriate devices, connectivity alone cannot deliver the benefits. The digital economy will only dawn (and thrive) in the presence of a regulatory system that embraces and supports change. *Connectivity, content*, empowered *citizens* and a regulatory system that supports *change* and innovation are often referred to as the “Four Cs” underpinning the digital economy. These are especially relevant in developing economies.

The combination of mobile and fixed networks with wireless Wi-Fi hotspots has enabled increased connectivity in a number of countries. The development of these technologies and the advent of the smartphone and the tablet have fostered the availability of internet services often referred to as ‘over-the-top’ services. This increases the availability of relevant content, provided that citizens are digitally literate and have access to smartphones and tablets. Indeed, the ‘freemium’ business model promises users the illusion of free basic content, where they only pay for updates and premium services.

The internet players (or OTTs) require their own source of revenue, of course, often obtained through monetisation of personal data. In the Competition Policy Handbook, four key trends were identified that underline the changes brought about by the digital economy.

Figure 9: Trends that underline changes brought about by the digital age

The digital age is a data-centric environment	Internet players are breaking down the integration between mobile networks and mobile services
Control of customer data is a significant strategic advantage	Communications infrastructures are converging

These trends have important implications for privacy and data protection, which are only now becoming apparent and which were not considered in the Competition Policy Handbook (nor are they considered in detail in this booklet). In a nutshell, data have become an important parameter of competition between market players, giving rise to competition policy concerns that exist alongside the traditional concerns that led to the introduction of data protection legislation. To interfere in the way that the new players monetise data would mean interfering in the business models of the new players, at a time when these models are only imperfectly known. To impose obligations such as allowing third parties access to (big) data as a result of an investigation could risk infringing existing data protection legislation, depending on the exact definition of personal data.

Whatever the conclusion reached about the appropriateness of imposing regulation on the OTTs,[20] the same reasoning should apply to the mobile operators, allowing them to compete on equal terms. This is because at present telecommunications operators: (i) may not be in a position to cross-subsidise services to consumers by charging other infrastructure users (due to net neutrality regulation and in some cases due to licence obligations) and (ii) may be constrained in their ability to monetise data in the same way as OTTs (often due to telecom-specific data protection and privacy requirements).

At the same time, OTT platforms that adopt a ‘freemium’ model are a clear alternative to voice and messaging services by the telecommunications operators and impose an obvious constraint on the ability of telecommunications operators to increase prices for their services to consumers. The market power held by incumbent operators as a result of their control of network infrastructure is correspondingly reduced, but the regulatory regime is slow to catch up.

20. The GSMA believes that the answer is not necessarily to extend regulation to the OTTs. There is an important issue concerning taxation of OTTs, which is outside competition policy. In competition policy, the system adopted should provide for flexibility for all services which are functionally equivalent. http://www.ft.com/cms/s/0/18f7c4d0-6215-11e6-8310-ecf0bddad227.html?ftcamp=engage/email/emailthis_link/ft_articles_share/share_link_article_email/editorial#axzz4I2xxFJE7

Competition and regulation

Overview

Faced with a competitive environment in which consumer choice is already based, or is prospectively based (in the near future) on technical innovation (i.e., on the availability of (smartphones, apps and operating systems), the traditional infrastructure-based system of regulation is fast becoming obsolete, yet endures.

Indeed, quite apart from the areas of regulation that affect the telecoms sector directly and specifically, in-country regulation generally applicable can in some cases have a disproportionate effect on sectors that need high levels of investment, such as the telecoms sector. Rules on foreign direct investment are an example — these arguably limit the potential for restructuring competition and for technology transfer.[21] Rules on foreign direct investment are "perceived to be less favourable in Africa than in other regions".[22]

Sectoral regulation of telecoms operators often takes the form of obligations in licences, permissions, concessions and similar legal instruments. The GSMA advocates for simple technology-neutral obligations and for intervention to be based on the existence of market power. A transparent, predictable and coherent approach to renewal of licences (in particular for the instruments that grant spectrum use) enables operators to make rational, long-term investment decisions. In reviewing the practice of countries in Asia and in Sub-Saharan Africa, it has become apparent that the lack of a standard approach to the renewal process can create significant uncertainty for mobile operators and their customers.

Figure 10: Best Practice in Sectoral Regulation [23]

Communications Licence (Concession, permission, authorisation)	**Spectrum Permission** (Licence, authorisation, concession)
A single, simple set of rules for commercial operation of communications networks and services Without service or technology distinctions Communications providers determine the level and the boundary of their operations on a commercial basis Intervention should be based on market power New licences should be granted for a minimum of 15 to 20 years. Terms for renewal must be clearly identified when new licences are issued, and government and regulators should work on the presumption of licence renewal for existing licence holders.	Simple description of the spectrum that is being made available to a provider or which is unlicensed Without service or technology distinctions With terms which deal only with spectrum-related issues, e.g., period of allocation, payment terms, management of interference New permissions should be granted for a minimum of 15 to 20 years. Terms for renewal must be clearly identified when new licences are issued and government and regulators should work on the presumption of licence renewal for existing licence holders.

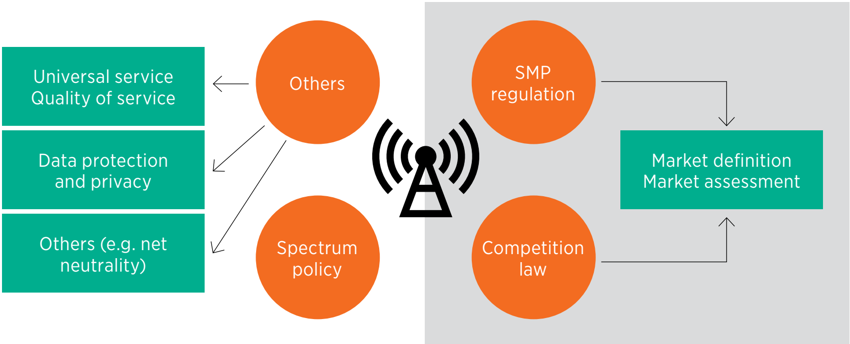
21. In the WBG African Competition Policy Report, quoted
22. WBG African Competition Policy, quoted, pages 4-5.
23. Adapted from GSMA, *Capitalising on ASEAN's Mobile Moment: Effective Mobile Policy and Regulation for the ASEAN economic community*, page 11, at: http://www.gsma.com/aboutus/wp-content/uploads/2013/08/Capitalizing_on_ASEAN%E2%80%99s_Mobile_Moment_24ppWEB.pdf

Telecommunications licences of operators across Sub-Saharan Africa and Asia include a number of obligations that arguably should be based on an assessment of the market position of the operators but often are imposed irrespective of the market power of the licensees. These obligations include interconnection, separate accounting, the prohibition of cross-subsidisation among different services, and prior approval of pricing and service terms. To impose obligations such as these on all players, irrespective of their position in the market, risks that smaller operators in particular find it difficult to challenge the incumbent and scale up.

Four areas where regulation affects mobile operators

In Figure 11, the orange shapes represent four main areas of intervention that apply to the mobile sector.

Figure 11: Different areas of regulation that are applicable to the mobile sector



Of those orange shapes, the two inside the grey area are the focus of the Competition Policy Handbook, and include competition law and regulation of operators with significant market power (SMP). In reviewing the position in Sub-Saharan Africa and in Asia, it appears that only some countries have a formalised system of SMP regulation, which in Asia is often confusingly named as the *ex ante* regulation of 'dominant' operators. In countries where there is no proper understanding of the difference between competition law and SMP regulation, there is a real risk of over-regulation.

The other two areas of regulation are outside competition policy and are broadly grouped under 'spectrum policy' and a general 'others' category. For ease of reference, under this 'others' category we have included areas of regulation often considered under the umbrella of consumer protection, such as:

- universal service obligations and quality of service obligations. These are often imposed on the incumbent or on the operator that happens to have infrastructure in a certain area. Although theoretically these obligations could be imposed on an enterprise with market power, in practice, market definition and market analysis are not pre-requisites for imposing these obligations;
- data protection and privacy rules, as seen above, which usually apply in a more stringent way against the telecoms operators;
- number portability;
- other more or less ad hoc regulatory instruments also aimed at the telecoms operators, irrespective of any market definition or market analysis. Important among these is the area of taxation and tax administration. The taxation of spectrum and spectrum holders is a very difficult issue for the mobile industry and is considered in detail in other GSMA documents.[24]

The two categories of regulation, namely 'others' and 'spectrum' should arguably be approached with more care than at present, not just in Africa and Asia. Specifically on spectrum, the need for competitive mechanisms for spectrum assignment is considered in Appendix 1. Before seeking to introduce a new entrant mobile network operator, governments and regulators must carry out a market assessment, to avoid the situation where too many operators are licensed, then they cannot compete and must exit the market, only for the government and regulator to start the same process all over again (see the examples in Figure 33, the case of Indonesia; and Figure 52, the case of Côte d'Ivoire).

If some regulation is applied in the name of consumer protection, there should be an understanding of what falls under consumer protection and why. Certain categories of consumers may be vulnerable, and regulation must be imposed to protect them, but there should be transparency on which categories of consumers need protection, and why. Perhaps consumers need protection against onerous terms and conditions, but surely if they do, that must apply not just to the telecoms operators, but to all industries. How many consumers even read the terms and conditions provided by the internet service providers? If they did read them, what could they do if they did not agree? If regulators impose extra measures on some players only, in the name of consumer protection, without a proper assessment of the market and without an understanding of the aims that the measures should achieve, the position can quickly become untenable. This is illustrated in Figure 12, with reference to the potential unintended consequences of retail regulation.

24. See for example: *Digital inclusion and the Role of Mobile in Nigeria*, at: http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2015/10/GSMA_Nigeria-Report_WEB.pdf

Figure 12: Micromanaging by regulators (especially at retail level) interferes with the competitive process

Consider a fictional country where quality of service is managed by the regulator by way of detailed KPIs on each mobile operator and also retail price tariffs. In this country, every consumer receives the exact same service, at the same price and the ability of operators to innovate is so limited as to be non-existing.

This extreme example shows how quality of service (QoS) regulation may lead to:

i. operators having less incentive to invest in network improvement (as these cannot be recouped through a competitive advantage): as a result, the total amount of network investment might be lower than under full competition on QoS;

ii. a sub-optimal allocation and use of resources if the choice of QoS KPIs (rather than the consumers) decides who should benefit from innovation (certain type of users, certain locations, some type of content);

iii. possibly, a lower common denominator, with a QoS for all or some below what could be refined with full competition.

This illustrates why regulators should apply a market analysis approach to regulation in areas where, usually, such an approach is not carried out and also refrain from regulating when competition law is sufficient to deal with the issues identified.

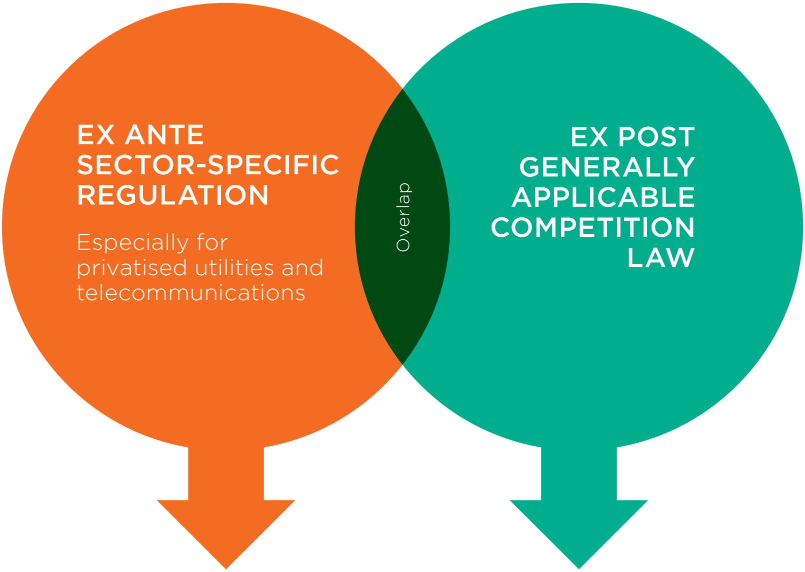
Competition law and SMP regulation

The other two categories, competition law and SMP regulation, share the aim to promote consumer welfare, enhance efficiency and ensure an effective competitive process. The goal of competition law and SMP regulation is therefore to protect the competitive process, for the benefit of consumers. Through the application of these rules, consumers should have access to a number of services that represent value for money. If that is not the case, then the assessment of the market needs to be carried out again, and proper remedies imposed (in the case of SMP regulation) or fines levied and commitments exacted (in the case of competition law).

Whereas the need for a proper market assessment is second nature to a competition authority, this is not the case in SMP regulation, resulting in market analysis and market assessment by the regulators that are not in all cases fit for purpose.

There is an overlap between the competition law rules that deal with abuse of a dominant positon and merger control on the one hand, and regulation imposed on telcos with significant market power. This is illustrated in Figure 13:

Figure 13: The overlap between abuse of a dominant position and competition law



Regulatory Frameworks

Global
ITU (for spectrum), WTO

Regional
In **Asia**: APT, APEC, ASEAN
In **Africa**: CEMAC, COMESA, EAC, ECOWAS, SACU, SADC, WAEMU

National
In some countries (e.g., Malaysia, Nigeria), the regulator applies competition law exclusively to the telecoms sector

Competition Law Frameworks

Regional
(sometimes)
In **Africa**: COMESA, WAEMU

National
In some countries (e.g. Hong Kong), the regulator has concurrent powers with the competition authority in competition law. Even when that is not the case, cooperation between the regulator and competition authority is necessary

Regulation only applies to specific sectors; competition law applies to all sectors. It is often said that regulation applies *ex ante* (before the event) and competition law applies *ex post* (after the event). This is a useful way to think about the respective roles of a regulator and a competition authority but, as explained in the Competition Policy Handbook,[25] can be misleading.

Merger control, usually applied by the competition authorities, is applied *ex ante*, prior to the merger taking place (the question is: 'Will this merger, if allowed to proceed, lead to a substantive lessening of competition?').

Once the obligations are imposed on an operator, by way of a licence obligation or other instruments, there needs to be a mechanism of enforcement. Enforcement of SMP regulation happen ex post, by definition, when the rules imposed by regulation have not been followed.

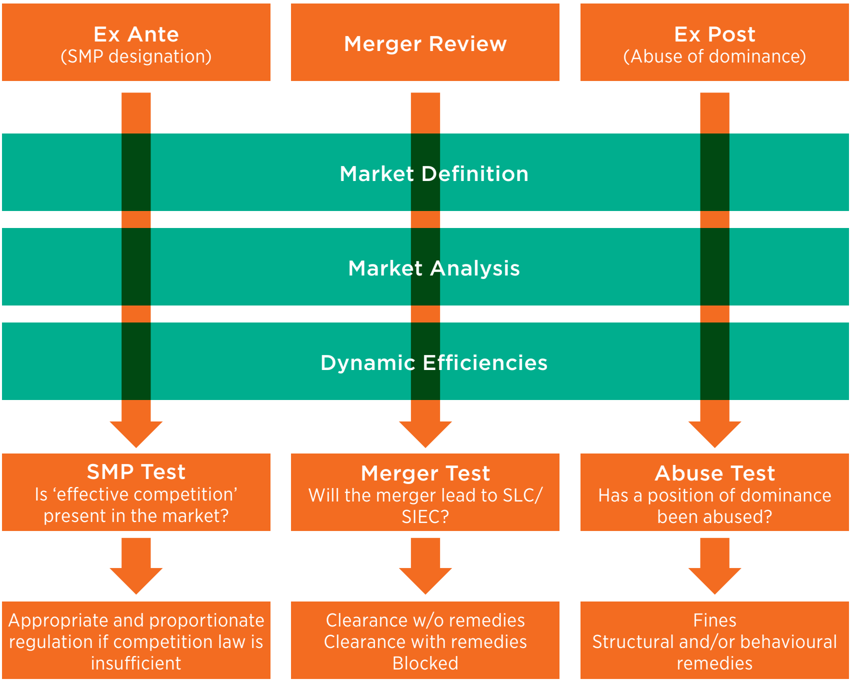
Figure 1: (reproduced again below) provides a high-level overview of differences.

Competition Law	Sector-Specific Regulation
• Applies to all sectors of the economy • The starting point of investigation often is a complaint against a specific action • Leads to imposition of fines and tailored measures to address specific issues (deterrent effect) • Competition authorities have more wide-ranging powers to conduct investigations and to impose fines	• Applies to specific sectors (telecom) only • The starting point is often a predetermined list of markets • Leads to the adoption of regulation that should be reviewed regularly • Regulators have less wide-ranging powers of investigation and enforcement, limited to the sector

The tools for market definition and market assessment in competition law and in SMP regulation are the same but the approach is different. This is explained in detail in the Competition Policy Handbook. In a nutshell, the following table illustrates in a diagrammatic form that in abuse of dominance and in merger control, and in SMP regulation, there needs to be a market definition and market assessment, but the final results are different for the two. Please consider the Competition Policy Handbook for the issues posed by the digital economy in market definition and market assessment.[26]

25. See Competition Policy Handbook, *How Competition Policy Works Today*. The handbook is available at: http://www.gsma.com/publicpolicy/wp-content/uploads/2015/10/Competition-Policy-Handbook.pdf
26. See Competition Policy Handbook, quoted, *Key Concept 1, market definition in practice.*

Figure 14: Market definition and market assessment in competition law and in SMP[27]



Significant market power - a summary

The Competition Policy Handbook did not provide a detailed explanation of the steps to be taken by a regulator engaged in the process of SMP regulation. Further to the feedback received from a number of regulators, we now provide in Appendix 2 a detailed explanation of the SMP regime with worked examples in the form of flowcharts. SMP regulation does depend on a market assessment, and this is not an easy task for regulators, especially in small jurisdictions where resources may be constrained and the number of experts limited. Nevertheless, it is especially important that a regulator understands the forces that shape a marketplace before it engages in regulation. Failure to do so can result in over-regulation.

In short, the system of SMP regulation starts with a consideration of the services that are substitutable at the retail level for consumers. When consumers in a geography can substitute away between products, then these products form a market (so called product market) and the geography forms a geographic market.

Once the retail market is defined, the regulator should apply the Three Criteria Test.

27. This is Figure 9 in the Competition Policy Handbook.

Figure 15: The Three Criteria Test as applied in the European Union, details in the flowcharts in Appendix 2.

Three-Criteria Test

1. The presence of high and non-transitory structural, legal or regulatory barriers to entry in the market
2. The market structure does not tend towards effective competition within the relevant time horizon (having regard to the state of infrastructure-based and other competition behind the barriers to entry)
3. **Competition law alone is insufficient to address adequately the identified market failure(s)**

These criteria are applied cumulatively — only if they are **all met** is a market considered not effectively competitive.

The test applies to overall market characteristics and structure, not to a specific operator (which is the focus of an SMP assessment).

If after application of the Three-Criteria Test the relevant retail market is found to be not effectively competitive, the closest wholesale market is analysed and the test is repeated. If the wholesale market is not effectively competitive, then the regulator must identify operators with significant market power and remedies must be imposed. As more particularly described in Appendix 2, remedies must be appropriate, that is, targeted to the particular issues identified and proportionate. They must also minimise the risk of regulatory failure.

Issues in regulation and competition law

A number of issues can be identified, as follows.

First, intervention in the telecommunications sector is predominantly by regulation rather than by competition law. In the context of the digital economy, this results in the inevitable tilting of the playing field, as the telcos are regulated and an increasing number of their competitors are not.

Second, at the operational level, intervention by regulation is often not based on a market assessment, resulting in blanket obligations often imposed to all operators regardless of market share, market power or in fact without a proper understanding of the issues that regulation is intended to address. Regulation is often applied at the retail level, giving rise to the risk of micromanagement identified in Figure 12. As shown in this booklet, in a number of countries there is no formalised system of regulation.

Third, in countries where the legal and political frameworks do not include competition law, it is not possible to apply criterion 3 of the Three-Criteria Test. Then, even though SMP regulation is still better than the alternative (i.e., regulation not based on a market assessment), the SMP system cannot operate properly and actors in the digital economy that are out of the regulatory system are also not captured by competition law.

Fourth, when SMP regulation exists, it is important that there should be market reviews every three to five years (maximum), given the pace of change in the communications industry. In our experience, however, it is not uncommon that reviews are carried out every six or more years, which increases the risk of application of outdated regulation.

Fifth, SMP regulation needs to start from a reassessment of the market definition. Too often a new SMP review consists of a regulator reaching out to the market definitions that were the basis for regulation at the time of the prior review. This results in a reassessment that is not conducted from the starting point of those services and products that consumers find substitutable at the retail level. Too often the new market review develops along the following lines, in the hypothesis of market regulation of SMS call termination: (i) at the time of the past review we considered that there was a market for SMS call termination; (ii) we note that currently there is some substitution between SMS and internet messaging, but we have no data about this; (iii) hence, the market is SMS call termination and we consider that the previous regulation should continue to apply. This fails to identify the question to be asked, namely how likely is it that a mobile operator would increase the price of SMS call termination if consumers can simply switch to a 'free' internet message provider? It may be that there are reasons why the operators can do so, but these should be seriously investigated.

Sixth, the above example shows the difficulty with collecting evidence. Internet providers do not have an obligation to disclose information, e.g., about the number of users in the country or rates of switching. This difficulty is acknowledged. Nevertheless, regulated companies and regulators can and arguably should make an effort to consider the rate of switching in their country. There are a number of apps providing internet analytics that can be used for the purpose, and also consumer surveys and company documents can provide valuable information. In the absence of proper information gathering, there is a real risk that existing regulation will continue to be carried out, by inertia.

Figure 16: SMP regulation in summary (see Appendix 2 for the details)

Market definition: Start with the retail market
Define product markets ▶ A question of substitutability
Define geographic markets ▶ Can consumers switch? Any equivalent products?

Is it necessary to regulate?
Use the three-criteria test at the retail level.
If the retail market is not competitive, look closer at the wholesale level.

Market assessment, if wholesale markets are not competitive
SMP analysis (market shares, barriers to entry, countervailing buyer power, etc.)

Competitive market
SMP is not determined
Previous SMP decisions are removed and obligations withdrawn

Non-competitive market
SMP determination
Ex ante obligations are imposed. (Note: obligations are considered less distortionary in wholesale markets)

The International Dimension

Globalisation requires a global outlook in regulation and in competition law, and cooperation at a supra-national level. Too often, supra-national intergovernmental organisations take a soft-law approach that limits their effectiveness. Supra-national cooperation among regulators and among competition authorities often remains at the level of capacity building and know-how. While these are valuable goals, cooperation on enforcement can bring great benefits by enhancing predictability and legal certainty for all market players. When influential bodies such as the WTO link the adoption of telecoms regulatory measures to the ability of members to participate in trade agreements, they create a bias towards sectoral regulation.

With an increasing degree of globalisation and trade liberalisation, markets have become generally easier to access. Regional cooperation can bring enormous benefits for the countries that participate. Specifically in competition policy, through cooperation, the countries become better able to tackle potential anticompetitive practices across borders. Businesses can take advantage of harmonised substantive and procedural rules, reduced costs, enhancing legal certainty and minimising the risk of inconsistent findings by more than one competition authority, or inconsistent regulation by different regulators.[28]

A number of reasons explain why competition law and regulation of telecommunications have been considered and developed within a regional cooperation setting. Competition law and economic regulation are seen as complementary to rules on trade, which are often one of the main aims of regional cooperation. Creating a centre of gravity at the regional level can enhance the status and importance of competition law and regulation domestically. And regional solutions can be seen as necessary to solve cross-border issues.

This latter point is of particular significance in the context of this booklet. If globalisation in the digital economy has led to businesses operating across borders, often without a presence in the countries in which they operate, and if reliance on competition law (rather than regulation) to tackle issues of anticompetitive agreements and abuse of dominance makes sense, then it is important to consider the international dimension of competition law and regulation. Regional organisations play an important role as facilitators and coordinators, as issues in the digital era are inherently cross-border and transnational. Regional platforms also enable country-level lessons and successes to be propagated, so that emerging and transition societies have reference points for best practice. Cooperation can happen as a result of bilateral agreements between countries, or between the agencies of two countries, formally or informally. Free trade agreements between two countries often provide the backdrop for bilateral cooperation. Of more relevance globally are forms of multilateral cooperation through intergovernmental organisations.[29] Binding obligations are more difficult to achieve (as there is always the

28. Maher M Dabbah, *International and Comparative Competition Law*, Cambridge University Press, 2010, 402, 403
29. Maher M. Dubbah, quoted, pages 576, 577

fear that they will pose a threat to national sovereignty). Non-binding obligations are based on achieving consensus through instruments of soft law, such as guidelines, best practices or principles.[30] Even within this category, there is a difference between achieving harmonisation and convergence on the one hand and, on the other hand, creating a detailed international code in regulation or competition law to be adopted at the domestic level.[31] Binding obligations range from concluding a binding multilateral agreement to building an international regime with an independent institutional apparatus with capabilities and competence to handle cases. This latter model has been attempted by two regional organisations in Sub-Saharan Africa, namely COMESA and WAEMU.

International financial institutions (primarily development banks) often act also as knowledge hubs and thought leaders in international developments. The World Bank Group advises governments on improving the effectiveness of competition enforcement and policy, generates knowledge and analytical products on the importance of stronger pro-competition frameworks, and supports global initiatives to place competition policy on the development agenda. The World Bank Group, for example, has developed a number of documents quoted in this booklet, under its Global Competition Policy Programme. Some organisations such as the OECD also perform a know-how function for members and non-members alike, operating as a think-tank and best-practice body.[32]

With the exception of COMESA and WAEMU in Sub-Saharan Africa and, prospectively, with the possible exception of ASEAN in Asia, the regional intergovernmental organisations surveyed in this booklet adopt different variants of nonbinding multilateralism. This often affects timely delivery or limits the efficacy of their initiatives. Member countries and wider stakeholders of these platforms need to realise that the challenges of a digital era cannot effectively be met by maintaining the status quo. The GSMA believes that regional supra-national organisations should "consider the following to achieve their mandates in a rapidly digitising world: [33]

- Strengthen links with non-state actors such as the private sector, NGOs and academia. This inclusive approach will enable regional organisations to develop a more accurate take on the issues at hand by drawing in the necessary expertise.
- Recognise that the challenges of a digital era are opportunities to revive and rejuvenate member collaboration. While negotiation impasses and political posturing cannot be completely avoided in multilateral cooperation, moving up the digital society value chain is an agenda that countries can easily rally around and will allow these regional organisations to reassert their influence. Digital trade and commerce, digital financial inclusion and digital identity for development are examples of common accessible agendas that can readily turn into regional development goals.
- Identify alternative mechanisms to encourage action among members. The non-binding nature of institutions does not mean they have to succumb to inaction. Rather, regional organisations should leverage their convening powers to bring together members and a wider group of stakeholders across different sectors. For example, ASEAN still does

30. Multilateral instruments within a loose framework include the Organisation for Economic Cooperation and Development (OECD) and the United Nations Conference on Trade and Development (UNCTAD). These have all developed and produced best practice in competition law over the years but generally have not considered the interplay between competition law and regulation.
31. Maher M. Dubbah, quoted, pages 120-121
32. Specifically on competition law, the OECD has developed in recent times the following documents: http://www.oecd.org/daf/competition/46193173.pdf (principles); http://www.oecd.org/daf/competition/45544507.pdf (guidance); and http://www.oecd.org/daf/competition/COMP_Toolkit_Vol.3_ENG_2015.pdf (operational manual
33. GSMA, The Mobile Economy, Asia Pacific 2016, page 60, https://www.gsmaintelligence.com/research/?file=5369cb14451e0db728bd266c7657a251&download

not have a cross-sectoral channel linking telecommunications and finance at a working level such as APEC's Ad-Hoc Steering Group on the Internet Economy. For these platforms to be effective, they need to be charged with shorter term and achievable goals to avoid the fate of producing diplomatic platitudes."

The WTO framework has arguably had the most influence globally. By linking the adoption of regulatory measures to the ability of countries to participate in international trade, and through its own mechanisms for implementation (by each country into their national laws) and enforcement (by its system of dispute settlements) the WTO is a formidable international organisation. It pays to consider its role in the liberalisation of telecoms, and also to consider that, within the WTO framework, there is no generally applicable competition law.[34] Again, this exemplifies how telecoms is subject to a more stringent regulatory approach than other sectors.

WTO and sector-specific regulation[35]

The General Agreement on Trade in Services (GATS) is foremost among the WTO instruments relevant to telecommunications. The GATS Annex on Telecommunications requires WTO members to ensure that suppliers of scheduled services may access the public telecommunications network and services on reasonable and non-discriminatory terms.[36]

In addition, GATS encompasses a set of schedules that contain market access commitments on specified services. Each Member may decide when, and to what extent, to commit on market access for telecommunications. Members' commitments vary greatly from one schedule to the next. Which services are opened to competition and the types of restrictions maintained reflect the type of reforms in place or anticipated by each government at the time of the negotiations.

The negotiations on basic telecommunications resulted in the Telecommunications Services: Reference Paper. It was designed as template of a framework for sector regulation adapted to a competitive environment.[37]

According to the WTO website,[38] a "total of 108 WTO members have made commitments to facilitate trade in telecommunications services. This includes the establishment of new telecoms companies, foreign direct investment in existing companies and cross-border transmission of telecoms services. Out of this total, 99 members have committed to extend competition in basic telecommunications (e.g., fixed and mobile telephony, real-time data transmission, and the sale of leased-circuit capacity). In addition, 82 WTO members have committed to the regulatory principles spelled out in the 'Reference Paper', a blueprint for sector reform that largely reflects 'best practice' in telecoms regulation." It is instructive to consider the relevant provisions in the Reference Paper,[39] which is legally binding for all WTO members that commit to it.

34. For a full list of WTO commitments and exemptions, see: https://www.wto.org/english/tratop_e/serv_e/telecom_e/telecom_commit_exempt_list_e.htm
35. With special thanks to Dr Hetham H Abu Karky, PhD, for his suggestions, and for sharing his article *Bring the Topic of Competition back to the WTO,* to be published shortly
36. The 2004 panel ruling in the WTO dispute settlement case on Mexican telecoms regulation confirmed the importance and legal weight of these guarantees. In this case, the US complained that Mexico had erected regulatory barriers that impeded the commercial resale of long distance and international long distance services originating in Mexico. The WTO Panel found in favour of the US (and third party interveners) and Mexico adopted new regulations. See: https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds204_e.htm
37. Telecommunications Regulation Handbook, Tenth Anniversary Edition, quoted, page 21
38. https://www.wto.org/english/tratop_e/serv_e/telecom_e/telecom_e.htm, although the data on the website appear to be not entirely up to date
39. Available at: https:b//www.wto.org/english/tratop_e/serv_e/telecom_e/tel23_e.htm

The Reference Paper includes six short provisions dealing with:

- the institutional framework (Principle 5, Independent Regulator) — there should be a regulator for the telecoms sector, separate from suppliers of telecommunications services and impartial with respect to market participants;
- transparency (Principle 6, Allocation and use of scarce resources; Principle 4, Public availability of licensing criteria);
- substantive provisions to ensure interconnection (Principle 2, Interconnection) and to allow members to impose universal service obligations on telcos (Principle 3, Universal service); and
- so-called "Competitive safeguards" (Principle 1).

There are two provisions under the competitive safeguards Principle 1, as follows (emphasis added).

> *<u>1.1 Prevention of anti-competitive practices in telecommunications</u> – Appropriate measures shall be maintained for the purpose of preventing suppliers who, alone or together, are a major supplier from engaging in or continuing anti-competitive practices.*
>
> *A major supplier is defined as: "a supplier which has the ability to materially affect the terms of participation (having regard to price and supply) in the relevant market for basic telecommunications services as a result of: (a) control over essential facilities; or (b) use of its position in the market.*
>
> *<u>1.2 Safeguards</u> – The anti-competitive practices referred to above shall include in particular:*
>
> a. *engaging in anti-competitive cross-subsidization;*
> b. *using information obtained from competitors with anti-competitive results; and*
> c. *not making available to other services suppliers on a timely basis technical information about essential facilities and commercially relevant information which are necessary for them to provide services.*
>
> Essential facilities re defined as *"facilities of a public telecommunications transport network or service that (a) are exclusively or predominantly provided by a single or limited number of suppliers; and (b) cannot feasibly be economically or technically substituted in order to provide a service."*

In a nutshell, therefore, Principle 1 obliges the WTO members that have committed to the Reference Paper to impose regulation for the prevention of anti-competitive practices by telecommunications operator that have a position of market power, *"alone or together"*, similar to the system of SMP and collective SMP regulation. The six principles of the Reference Paper have come to serve as a checklist of success of telecommunications reform in many countries.[40]

40. World Bank Telecommunications Regulation Handbook, quoted, page 21

WTO and competition law

Nothing similar applies generally to the economy as a whole, as would be the case if the WTO included a framework paper for competition law. In 1996, the WTO Working Group on the Interaction between Trade and Competition was created. This became known as the Singapore Group. Initially it focused on what was deemed to be the core principles of interface between competition law and trade, namely: transparency, non-discrimination, procedural fairness, voluntary cooperation, capacity building and limitations on hard core cartels. The Singapore Group made a major contribution to the initiation of a debate on a WTO competition law agenda, but its mandate was always limited. The intention was to provide a forum for discussion without any signal that formal negotiations between WTO members on a competition agreement would definitely ensue. In practice, insufficient progress has been made towards a WTO competition law framework. As has been stated:

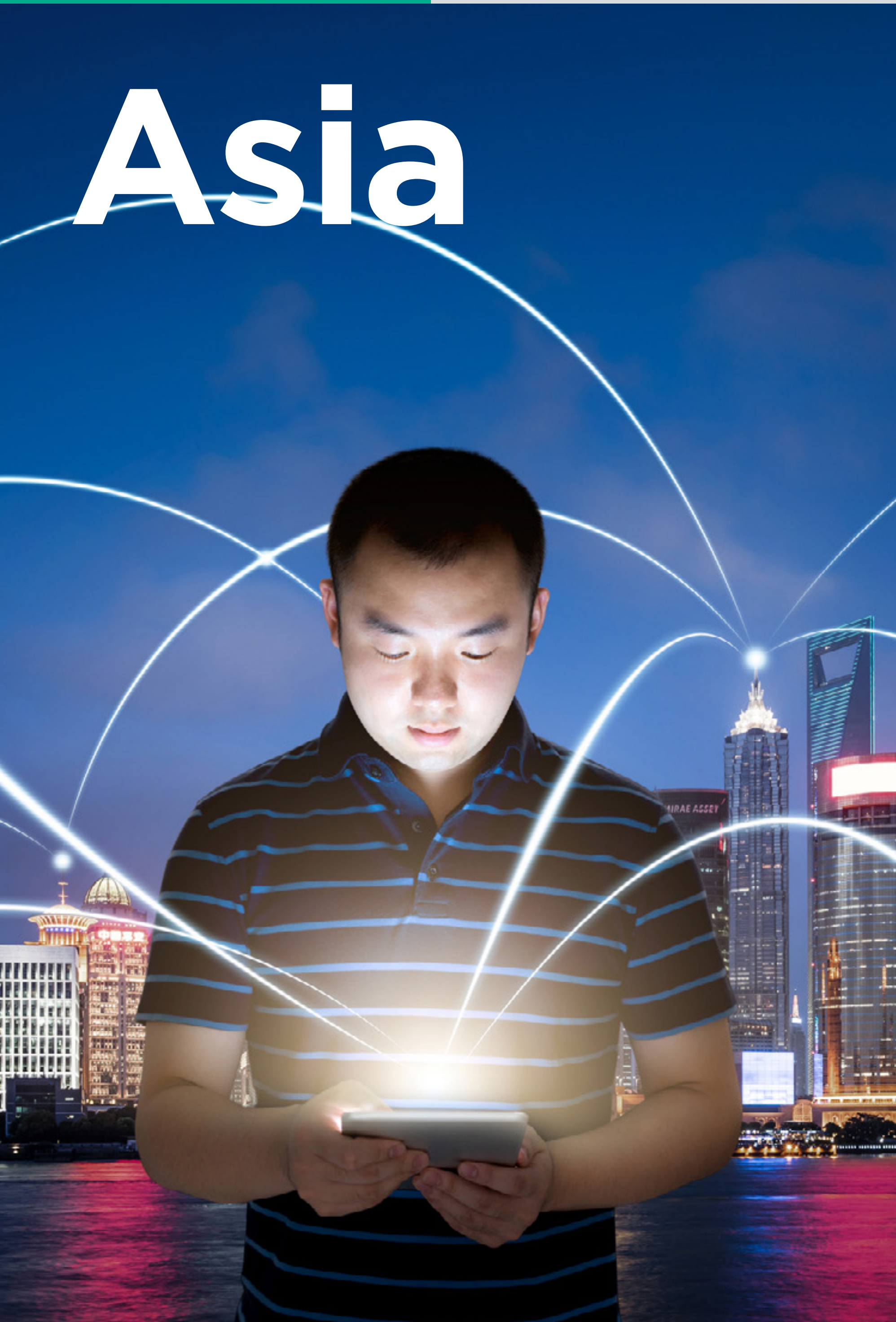
"Perhaps the only occasion on which the WTO community came fairly close to taking a concrete step was at the 4th Ministerial Meeting — the Doha round — in 2001 when it was agreed to include competition policy in the Ministerial Declaration and to start formal negotiations on competition policy within the WTO framework following the 5th Ministerial Meeting, namely the Cancun round which would occur in 2003. This particular Declaration established a 'vision' of a bright future for a WTO competition law agenda especially in light of how specific it was in terms of setting out the topics on which negotiations would take place, including, among other things: hard core cartels; offering support to competition authorities of the developing world through capacity building; and cooperation between countries and specifically between their competition authorities in the field. The remarkable failure of the Cancun round in 2003 however delivered a fatal blow to the Doha round efforts and achievements with the decision taken to exclude competition policy from future trade negotiations at the WTO."[41]

As a result of this resolution, the working group established pursuant to the Doha declaration was put on hold, although not abolished. The group still provides support to countries that wish to implement a competition policy. This is evident in the technical support provided to Zambia, Cameroon, Ethiopia, Yemen, and Trinidad and Tobago.[42]

Nevertheless, the WTO's rules linking the ability to participate in international trade and telecommunications liberalisation mean that in virtually every country there is a telecommunications regulator. The lack of an equivalent provision in competition law means that the adoption of competition law is not as widespread. This perpetuates a system of sectoral regulation arguably not well suited to the digital economy.

41. Maher M. Dabbah, quoted, pages 157-158
42. WTO (2015), competition policy: Technical Assistance in regard to Trade and Competition Policy: From: http://www.wto.org/english/tratop_e/comp_e/ta_e.htm#regional [Accessed 05 July 2016].

Asia



Summary

To foster the development of the digital economy, the system of sector-specific regulation should be flexible; regulation should only be applied after a proper market assessment, and only where competition law is not sufficient to deal with the issues identified. Competition authorities and regulators should cooperate in-country and across countries. Across Asia, a number of countries are at the forefront of competition policy globally. Adopting the right regulatory framework would be a necessary step for so-called 'emerging' and 'transition' societies to move up the digital value chain.

Asia is "arguably one of the most diverse regions in the world", with a "varying degree of socioeconomic and digital society development" and "represents a very diverse landscape of emerging, transition and advanced digital societies" (GSMA Digital Societies Report 2016),[43] namely:

- **emerging digital societies** comprise countries where digitisation is mainly a tool for socioeconomic development, particularly in relation to improving social inclusion;[44]
- **transition digital societies** comprise countries where the focus is on personalisation of services, for greater engagement between individuals and institutions;[45] and
- **advanced digital societies** are those where it is possible to develop properly interconnected and interoperable processes and services across sectors for productivity and efficiency gains. Asia includes a number of digital societies among the most advanced.[46]

In the journey to move up the digital value chain, policymakers should focus on all elements of an interoperable digital ecosystem at the national level, including (i) fostering digital literacy and affordable devices; (ii) making it possible for the new services to be provided seamlessly; and (iii) supporting the development of the Internet of Things. The appropriate regulatory settings underpin the development of a digital society. Adoption of a regulatory regime based as much as possible on a proper understanding of the marketplace that is to be regulated is the key. Policymakers and agencies should consider the recommendations highlighted in Figure 3. The adoption of these recommendations will ensure that the five features of best practice in competition policy identified in Figure 2 are adopted. These are reproduced below.

43. GSMA, Advancing Digital Societies in Asia, 2016, available at: http://www.gsma.com/newsroom/press-release/new-gsma-study-tracks-digital-society-progress-asia/, page 20
44. In the Digital Societies Report, this category is represented by Bangladesh and Pakistan
45. In the Digital Societies Report, Indonesia and Thailand fall into this category
46. In the Digital Societies Report, Australia, Japan and Singapore were selected as representative countries

Figure 2: (reproduced again below) Five Features of Best Practice in Competition Policy

1	A **properly functioning competition authority** and a **properly functioning regulator**, i.e., that are independent of government, properly staffed and resourced.
2	Economic regulation must address **market failures**, based on evidence from up-to-date market reviews. Regulators must be clear about the reasons for, and impact of, regulation in all cases.
3	Ideally, **competition law should be enforced by a competition authority**. If the regulator has **sectoral competition law powers**, the need for cooperation between agencies is greatest.
4	Both competition authority and regulator understand **the interplay** between their respective jurisdictions and **work together** to address the issues identified.
5	There is appropriate, **meaningful cooperation** between competition authorities and regulators at the supranational level too.

Feature 1: A properly functioning regulator and a properly functioning competition authority

Figure 17 provides an overview of the position at the national level in the Asian countries listed. In all 23 countries surveyed, there is an active regulator with powers to regulate the telecommunications industry (at least). There are examples of more converged regulators for telecommunications and media in Hong Kong, Malaysia and soon Singapore – no regulatory regime applies to the players of the digital age in their entirety. This focus on regulating the telecoms sector is historical. As an example, regulation is required due to the link between WTO trade agreements and telecoms liberalisation and regulation, as described above (see The International Dimension in the introductory chapters).

Active regulators do not always perform their duties with clarity as to the reason why they regulate and after a properly performed market assessment, potentially leading to regulatory market distortions. (See Feature 2 below).

Twenty-two out of the t23countries surveyed in Asia have competition laws. **Cambodia** is the exception. A competition law has been adopted but is not yet in force in **Myanmar** and in **Brunei Darussalam**. The competition authority has only just started its operations in the **Philippines**, amongst reports of initial uncertainty surrounding the application of merger control in the telecommunications sector.[47]

47. The acquisition by Globe Telecom, Inc. and PLTD, Inc. of San Miguel Corp.'s telecommunications business was subject to a legal wrangle between the companies and the Philippine Competition Commission. See: http://cnnphilippines.com/business/2016/09/14/competition-body-fights-to-continue-investigating-Globe-PLDT-deal.html

Measuring the effectiveness of competition law enforcement in countries where the competition authority has been active for a number of years and benchmarking it against other countries and regions is a notoriously difficult task. The WBG African Competition Policy Report[48] measures effectiveness according to the Bertelsmann Stiftung's Transformation Index (BTI), derived on the basis of expert assessments.[49] Unsurprisingly, high-income regions are shown to have more effective enforcement of competition policy. Although the Report specifically considers the situation across Africa, it does conclude that competition policy enforcement could be improved in 'developing countries' in East Asia and the Pacific. This conclusion is borne out by the case studies the survey in this chapter.

As the cases shown exemplify, there is no doubt that competition law can and is applied in Asia, and has the potential to be relied upon in preference to regulation, whenever possible. Advanced digital societies in Asia are at the forefront of competition law enforcement anywhere in the world. **Australia**, **New Zealand**, **Japan, Singapore** and **South Korea** have an impressive history of application of the competition rules. South Korea's early investigation of Google remains one of the earlier cases where competition law was deployed to consider the issues posed in the digital economy (Figure 25). In **Australia**, the 2015 review of competition policy (the so-called Harper Report) is a model of clarity.

There is therefore plenty of precedent in Asia for emerging and transition societies wishing to step up the digital value chain to adopt a regulatory regime that encourages change and innovation. In regulatory terms, this involves the adoption of a system of competition policy where competition law is applied in most cases, and regulators concentrate on regulating only where it is truly necessary. Indeed, as early as 2005, the **Hong Kong** regulator provided an early example of a decision to lift existing price regulation on the incumbent telecoms operator, PCCW, in the light of the changed conditions of competition in the marketplace (see Figure 21).

48. WBG African Competition Policy Report, quoted, Figure A-4, page 4
49. As quoted in the WBG African Competition Policy Report: Transformation Index of the Bertelsmann Stiftung 2016. Gutersloh, Bertelsmann Stiftung. http://www.bti-project.org/en/home/ (referred to as '**2016b**,' accessed May 24, 2016).

Figure 17: Status of adoption of competition law and market power regulation in Asia

Societies	Regulation based on market power [50]	Competition Law
Australia	✓	✓
Bangladesh		✓
Brunei Darussalam	✓ [51]	✓ (adopted 2015. Not yet in force)
Cambodia		✗
China	✗	✓
Hong Kong	*Ex ante* regulation much reduced	✓ (adopted 2010. In force 2015)
India	✓ [52]	✓
Indonesia		✓
Japan	✓	✓
Laos		✓
Macau		
Malaysia	✓	✓ (applied by regulator)
Myanmar	✓	✓
New Zealand	✓	✓
Pakistan	Currently 25% SMP threshold. New SMP regime considered	✓
Philippines		✓ (adopted 2015. Just into force)
Singapore	✓	✓ (applied by regulator)
South Korea	✓	✓
Sri Lanka		✓
Taiwan	✓	✓
Thailand	✗	✓ (limited enforcement)
Vietnam		✓

50. An earlier example of a table bringing together the application of competition law and regulation in different countries was in Figure 10 of the Competition Policy Handbook - many thanks to those who sent us comments. Countries left blank are those for which we have no information. Details of the relevant provisions are to be found in the sections on competition law and regulation based on market power. It is possible that in countries where there is no formal system of market power regulation such as SMP regulation (marked with a cross) nevertheless the regulator applies SMP principles, as a matter of best practice.
51. In Brunei Darussalam, at present there are a number of instruments that refer to the market power of licensees (in the telecommunications sector) but a general overview on how the regulator will apply SMP regulation is not yet published. A Code has been drafted that will specify that SMP designated operators will have to comply with obligations, similar to the telecoms rules that apply in Singapore. At the time of writing (November 2016), the Code is awaiting publication in the Gazette, prior to coming into force.
52. In India there is no formal SMP regulation per se, but TRAI has published a Reference Interconnect Offer Regulation (2002) that considers SMP/market power. This is relied upon by the TRAI, to apply SMP principles as general principles of good regulation.

Feature 2: Economic regulation addresses market failures and the regulators are clear about reasons to regulate and impact of regulation

Appendix 2 provides guidance on the system of regulation of operators with significant market power (SMP), based on EU precedent, including flowcharts of two worked examples.

Ten out of the 23 countries listed in Figure 17 recognise formally that the regulator should apply economic regulation only after a proper market assessment and only to address issues that have been clearly identified. In **India**, there is no formal legislative framework for SMP regulation but the regulator in practice accepts a market analysis approach to regulation. Advanced digital societies tend to adopt such a framework, as demonstrated by **Australia**; **Hong Kong**; **Japan**; **New Zealand**; **Singapore**; **South Korea** and **Taiwan**.

Countries that have introduced their regulatory regimes at a comparatively later stage (such as **Myanmar**) include formal powers to impose regulation on "dominant licensees" but the regime is very new and the regulator is only now beginning to regulate.

Formal application of a system of SMP regulation is not generally a feature of emerging and transition digital societies. In **Pakistan**, currently there is a presumption of market power for all operators with a more than 25% market share. This has proven inflexible in practice (notwithstanding the theoretical ability to dislodge the presumption after a market analysis). Under ongoing plans for reform, the government recognises that the regime should be streamlined and increasingly governed by competition rules.

The difficulties that arise when retail regulation in particular is imposed without a proper understanding of its impact on the market regulated are exemplified in Figure 12. Further, it is particularly important that a proper market assessment underpins spectrum assignment. Failure to do so may result in a country having too many mobile operators, and being caught in a loop where: (i) too many operators are licensed. These find it difficult to compete; (ii) the government pushes for consolidation; (iii) mergers are often complicated by the need for multiple approvals and sometimes over-licensing of operators results in withdrawal of licences. The case of **Indonesia** provides an illustration of these issues (Figure 32). Spectrum assignment in the absence of a thorough understanding of the market may lead to undesirable consequences when new mobile operators find that they cannot meet the price of the spectrum (and all other regulatory requirements), as was the case recently in **Thailand** (Figure 31).

Setting the reserve price unrealistically high can happen in advanced societies too, as demonstrated by the **Australian** case in Figure 30.

Feature 3: Ideally, competition law powers should be exercised by the competition authority

In most countries surveyed there are two agencies with separate powers of application of the competition rules and regulation. The pros and cons of the different regimes are summarised in Figure 18. Overall, whenever there are two agencies, there will be a need for coordination and cooperation.

It seems that the **Singapore** model of exclusive application of the competition rules by the regulator may be achieving more acceptance across Asian countries. It was adopted in **Malaysia** and it seems that currently **Pakistan** is considering it, and **Myanmar** might adopt it when the competition law comes into force in 2017. If the regulator is granted sectorial powers to apply competition law, the competition authority should also be strengthened and the two agencies should work together effectively.

Policymakers considering this model should be aware of the potential for divergent application of the competition rules to the telecoms sector, differently from the rest of the economy and of the risk that resources may be diverted from funding the competition authority, towards funding a regulator with jurisdiction limited to the sector. This could limit the gains of proper enforcement of the competition rules for the economy as a whole, as seen here.

Policymakers considering a change to the system of competition policy overall may also consider a model where sectoral regulators could be integrated within competition authorities. This model has been adopted in New Zealand (and in Europe, in Estonia, in The Netherlands and in Spain). It has the potential to ensure properly consistent application of competition law and sectoral regulation of utilities and communications, across all sectors of the economy. Particularly where competition policy expertise may be scarce, the integrated model could achieve synergies and would harness the broad expertise of both regulation and competition specialists, enhancing the quality of decisions.[53]

53. Different possible models of institutional arrangements, including the integration model, are considered in detail in the GSMA, CEG report, *Resetting Competition Policy Frameworks for the Digital age*, quoted, Table 1, page 43.

Figure 18: Existing models in competition policy — Asia

	Two agencies: Competition authority and separate sectoral regulator	**Two agencies:** Regulator with concurrent powers in competition law	**Two agencies:** Regulator with exclusive jurisdiction to apply to telcos competition law	**One agency:** Only the regulator, only regulation	**One agency:** The Integrated Model
EXAMPLES	Most countries surveyed	Hong Kong	Malaysia, Singapore, Myanmar? Pakistan?	Cambodia	New Zealand
POSITIVES	Ensures that competition law is applied equally to all sectors of the economy	Ensures that competition law should be applied with sector knowledge, but competition authority retains ability to consider issues too	Ensures that competition law should be applied with sector knowledge. No safeguard of competition authority's involvement.	Convenience. Country complies with WTO Reference Paper	Properly consistent application of competition law and sectoral regulation across all sectors of the economy. Synergies
NEGATIVES	Need for the agencies to understand their roles and to cooperate	Evidence suggests that regulators tend to apply regulation more than competition law. The competition authority defers to regulator	Risk of over-reliance on regulation of the sector. Risk that regulator applies regulatory categories when applying competition law	Especially with convergence in the digital economy, only telcos are subject to scrutiny. Non-level playing field	If the agency is not properly resourced, risk of backlogs. Need for coordination across the different parts of the agency.

Source: GSMA

Feature 4: The competition authority and the regulator understand the interplay between their respective jurisdictions and work together

Advanced societies in Asia have systems for cooperation and coordination between the competition authority and the regulator. In **Hong Kong**, the two authorities have entered into an MoU. In **Malaysia** the competition authority, the MyCC, chairs a competition law group of which all regulators with competition law powers are members. In **Singapore**, the competition authority and the regulator have issued joint guidelines for the application of competition law to the telecoms sector.

The need to cooperate is greatest in cases of merger control where lack of clarity and the overlapping jurisdictions of the regulator (on spectrum issues, usually) and of the competition authority can lead to confusion and contradictory outcomes.

Feature 5: There is appropriate meaningful cooperation between competition authorities and regulators at the supra-national level too

There is appropriate meaningful cooperation between competition authorities and regulators at the supra-national level too

Figure 19 includes all 42 countries in the wider Asia Pacific area that are members of APT. Shaded in grey are those countries that are members of all three main regional inter-governmental organisations in Asia, namely **Brunei Darussalam**; **Indonesia**; **Malaysia**; the **Philippines**; **Singapore**; **Thailand** and **Vietnam**. Logically, these countries can be expected to have great influence in shaping competition policy at the supra-national level in Asia.

Intergovernmental organisations tend to be run along silos so that there does not appear to be sustained continued cooperation and coordination between the competition agenda and the telecoms regulatory agenda in the main three intergovernmental organisations surveyed in Asia. The creation within APEC of an ad-hoc steering group on the internet economy is a rare occurrence of cooperation amongst different branches within APEC.

ASEAN's newly created Economic Community aims to deliver a highly integrated economy through the ASEAN states. Early results include the adoption of Regional Guidelines on Competition Policy and the commitment of the members to introduce competition law by 2015. The adoption of competition laws for the first time in the Philippines and in Brunei Darussalam in 2015 is a direct consequence of the creation of the ASEAN Economic Community.

APT has had a very important role in achieving harmonisation at the global level for use of the 700 mHz band for mobile broadband.

More could be done to strengthen ties between regulators and competition authorities at the supra-national level.

There is one formally organised group, the South Asian Telecommunications Regulator's Council (SATRC). The ITU arranges periodic Asia-Pacific regulators' roundtable and international training programmes.

Cooperation at the supra-national level between competition authorities tends to be on the basis of bilateral MoUs between national authorities. The competition Commission of Singapore was the host of the 2016 annual conference of the International Competition Network. At the time of writing, it was announced that the Competition Commission of India will be the last of the annual conference of the ICN in 2018, in Delhi.[54] These events underscore the new pre-eminence of Asia in international competition enforcement.

54. http://currentaffairs.gktoday.in/india-host-2018-international-competition-network-annual-conference-11201637047.html

Figure 19: Membership of regional organisations in Asia

Country	APT	APEC[56]	ASEAN
Afghanistan	✓		
Australia	✓	✓	
Bangladesh	✓		
Brunei Darussalam	✓	✓	✓
Bhutan	✓		
Cambodia	✓		✓
China	✓		✓
Chinese Taipei		✓	
Cook Islands	(Associate member)		
Fiji	✓		
Hong Kong	(Associate member)	✓	✓
India	✓		
Indonesia	✓	✓	✓
Iran	✓		
Japan	✓	✓	
Kiribati	✓		
Laos	✓		✓
Macau	(Associate member)		
Malaysia	✓	✓	✓
Maldives	✓		
Marshall Islands	✓		

55. APEC includes economies that are geographically outside Asia Pacific, in America and Russia: Canada, Chile, Mexico, Peru, Russia and USA.

Figure 19 (continued): membership of regional organisations in Asia

Country	APT	APEC[56]	ASEAN
Mongolia	✓		
Myanmar	✓		✓
Nauru	✓		
Nepal	✓		
New Zealand	✓	✓	
Niue	(Associate member)		
North Korea	✓		
Pakistan	✓		
Palau	✓		
Papua New Guinea	✓	✓	
Philippines	✓	✓	✓
Samoa	✓		
Singapore	✓	✓	✓
Solomon Islands	✓		
South Korea	✓	✓	
Sri Lanka	✓		
Thailand	✓	✓	✓
Tonga	✓		
Tuvalu	✓		
Vanuatu	✓		
Vietnam	✓	✓	✓

56. APEC includes economies that are geographically outside Asia Pacific, in America and Russia: Canada, Chile, Mexico, Peru, Russia and USA.

Regulation

A regulatory regime that supports change and innovation is a precondition for a level playing field in the digital economy. A system of regulation based on regulatory forbearance when competition law is sufficient to deal with the issues identified, and on the finding of a market failure as the basis for regulation, reduces the risks of over-regulation. It is not a coincidence that advanced societies in Asia have predictable, fact-based system of regulation and a way for the competition authority and the regulator to cooperate and coordinate sectoral intervention. More coordination at the international level would help to ensure operators that work across Asian countries are faced with similar substantive rules can be heard more easily by all regulators involved in any one cross-border investigation.

National laws

The following countries recognise a system of regulation based on the market power of the operator:

- In **Australia**,[57] the competition authority,[58] the Australian Competition Consumer Commission (ACCC), is also responsible for access and pricing regulation across a number of utility sectors and for telecommunications. The ACCC can impose certain *ex ante* regulatory obligations at the access or wholesale level (there is no *ex ante* economic regulation at the retail level) on providers of telecommunications services by 'declaring' those services to be access services ("declared services" under Part XIC of the Competition and Consumer Act 2010, the so-called Telecommunications Access Regime). The ACCC can declare a service if it is satisfied that this will promote the Long-Term Interests of End-users (LTIE). In applying the LTIE test, the ACCC has regard to matters such as whether declaration will promote competition in downstream markets, facilitate any-to-any connectivity and promote efficient investment in, or use of, infrastructure. If a service is so declared, the ACCC must commence an access determination inquiry in order to make an access determination that specifies on an *ex ante* basis the terms of access (including price). In 2015, the Harper Report[59] considered issues of competition policy in regulation as well as in competition law. Recommendation 50 relates to *access and pricing regulations.* The recommendation is to transfer these competences to a new Access and Pricing Regulator with a remit to consider access and pricing across different regulated sectors, such as telecommunications, water, gas and electricity. This is considered important to ensure consistency of approach across all traditionally regulated sectors, although the Australian government did not support this recommendation, as seen in Figure 26 below. The report further considered that declaring that a service as an 'access service' and consequent access

57. Getting the Deal Through, Telecommunications and Media, 2016 (subscriber service): https://gettingthedealthrough.com/area/39/jurisdiction/5/telecoms-media-australia/
58. It is interesting that the ACCC is responsible for the investigation of 'misuse of market power' against firms possessing 'substantial market power' under the competition laws. This terminology effectively reverse the terminology in use in countries where competition law relates to 'abuse of a dominant position' (and regulation refers to 'Significant Market Power').
59. Harper Report, available at: http://competitionpolicyreview.gov.au/final-report/

determination should only occur when it is in the public interest. Specifically, "*the onus of proof should lie with those seeking access to demonstrate that it would promote the public interest rather than on infrastructure owners to demonstrate that access would be contrary to the public interest*".[60] The Harper Report also advocates for robust review of existing regulatory restrictions on competition, acknowledging that regulation may be necessary, but that *better regulation* may be needed. Specifically as regards the communications sector, in the report reference is made to the Australian Government reviews in the communications portfolio,[61] which "should consider the impact of current restrictions on competition in that sector".

- In **Hong Kong**, traditionally the regulator can impose price control measures for carrier licensees in a dominant market position to prevent anti-competitive behaviour (*section 7G, Telecommunications Ordinance (Cap. 106)*). These sectoral price control measures have been superseded by competition law when the Competition Ordinance came into force on 14 December 2015. In 2005, the regulator decided to remove requirement of prior approval of changes in retail price on the incumbent, PCCW.

Figure 20: Hong Kong withdraws *ex ante* tariff approvals on PCCW

In January 2005, the Hong Kong regulator announced the lifting of the prior approval requirement on the dominant operator, PCCW-HKT Telephone Limited's (PCCW-HKT) prices. This change was made by issuing a new licence, then called a 'fixed carrier' licence. Under this licence, PCCW-HKT did not have to get its prices approved by the regulator any longer.

This decision reflects a change from ex ante regulation to ex post competition law. The change was prompted by significant changes in market circumstances for the fixed telecommunications service segment in Hong Kong since ex ante tariff regulation was first implemented in 1995. Key market changes included:

- progressive market share erosion for the incumbent,
- the emergence of alternative products, and
- the lowering of barriers to entry.

From 1 August 2008, unified carrier licences have become the only carrier licences available for the provision of fixed, mobile and/or converged services in Hong Kong.

60. Harper Report, quoted, para. 2.1
61. In the Report, the reference is to "See, for example: Australian Government 2014, Spectrum Review, Australian Government Department of Communications, viewed 9 February 2015, http://www.communications.gov.au/consultation_and_submissions/spectrum_review>"

- In **Japan**, market liberalisation began very early (in 1985). Following the February 1997 WTO agreement on basic telecommunications services, Japan made significant changes to its regulatory regime such as elimination of the so-called 'supply-demand' standard for market entry and foreign ownership restrictions on carriers, (except NTT).[62] Competition policy moved towards the adoption of a system more based towards *ex post* application of competition laws in the new millennium. In 2004, the previous system of allowing entry by permission (licence) was abolished, as was the system of retail rate/tariff regulation. The current system includes *ex ante* regulation of "dominant carriers". The criteria for the designation of dominant carriers depend on whether the players are fixed or mobile,[63] bearing in mind that the regulator has introduced functional separation between the 'facilities department' (for access) and 'sales department' of NTT East and NTT West. Dominant carriers have specific obligations due to their position of market power, including for notification of reference interconnection offers and for accounting separation. Regulatory obligations are also imposed on the dominant carriers, not to engage in the activities prohibited by the WTO Reference Paper.[64]

- In **Malaysia**, the regulator is the Malaysian Communications and Multimedia Commission, which regulates under the terms of the Communications and Multimedia Act (1998). Malaysia has adopted a system of *ex ante* economic regulation similar to the Australian model under the Telecommunications Access Regime. The regulator applies the Long-Term Interest of End Users and Bottleneck Facilities as the key concepts which are of most direct relevance to the *ex ante* regulation of wholesale access to telecommunications facilities and services. Based on this analysis, the MCMC publishes an "Access List" of obligations imposed for the provision of certain services.[65] As seen in Figure 28, the regulator has also powers to enforce competition law exclusively to firms in the sector.

- In **Myanmar**,[66] a Telecoms Law was enacted in 2013. It contains some provisions for *ex ante* regulation for access and interconnection. According to the Interconnection and Access Rules, the relevant Ministry (Department) has the power, *inter alia*, to direct licensees to enter into an interconnection agreement and direct a dominant licensee to enter into an access agreement with another licensee. The Telecoms Law and the Telecoms Competition Rules (enacted in 2015) also provide *ex ante* regulation of anticompetitive practices. For instance, licensees must not engage in conduct or any arrangements that would hinder the nature of free competition in the communications market. In addition, licensees are precluded from restricting users or customers by requiring them only to acquire telecommunications equipment or services from such licensee. It is too soon to appreciate how the system will develop. Some speculate that the regulator will have jurisdiction over the application of competition law, exclusively, or jointly with the competition authority.

62. For a history of the early liberalisation of telecommunications in Japan, see OECD, *Regulatory Reform in Japan*, 1999, available at: https://www.oecd.org/regreform/2506744.pdf
63. A so called "Category 2 designated facilities" Rule applies to mobile operators: these are judged to be "dominant if they have: (i) a share of all terminals of over 10%; and (ii) a revenue share of over 40% over a period of time; or (iii) if they have above 25% but below 40% share, several criteria are considered to determine whether they are dominant, including the size of business, the brand power, the price elasticity of demand.
64. On the more recent history of liberalisation in Japan, see the two presentations: http://www.itu.int/ITU-D/finance/work-cost-tariffs/events/tariff-seminars/Japan-13/documents/Sess2-4_Japan_UMINO.pdf (ITU, 2013) and https://www.jointokyo.org/files/cms/news/pdf/Presentation_Mr_Yoichi_Iida.pdf (WTO, 2011)
65. The Access List was lately reviewed in 2015. See the Public Inquiry Report: http://www.skmm.gov.my/skmmgovmy/media/General/pdf/Access-List-PI-Report-2015.pdf
66. Getting the Deal through, quoted, https://gettingthedealthrough.com/area/39/jurisdiction/132/telecoms-media-myanmar/ (subscriber service)

- In **New Zealand**,[67] where the Commerce Commission is an integrated competition authority and sectoral regulator for all sectors of the economy,[68] Schedule 1 of the Telecommunications Act 2001 includes a number of wholesale designated access services and specified services that can be regulated, at the request of an access seeker. An access providers can also trigger a review of the regulation imposed. The Telecommunications Act imposes a requirement on the Commerce Commission to review the list every five years, to determine specifically whether existing services should be deregulated.

- In **Pakistan,** currently Section 17(1) of the Telecommunications Rules declares that an operator "shall be presumed to have significant market power when it has a share of more than 25 per cent of a particular telecommunications market." Section 17(2) gives to the regulator the authority to extend the SMP status to operators with less than 25 per cent market share or to relieve those with more than 25 per cent of the status after a comprehensive analysis of the market. A comprehensive review of the regulatory framework started in 2015, under the New Telecommunications Policy (NTP)[69]. Under the NTP, the market should be increasingly governed via competition rules and mechanisms. The Ministry of Information Technology and Telecommunications (MoITT) under its authority from the Telecoms Act[70] will have the task to develop rules to "identify product markets, determin[e] the respective market power of service providers within each market, determin[e] whether anti-competitive behaviour is prevalent and what remedies should be applied as *ex ante* or *ex post* measures."[71] It appears that Pakistan is therefore heading towards the adoption of a system where the regulator will have powers to apply the competition rules to the telecoms sector, similar to Malaysia and Singapore, as will be described below, under 'Competition'.

- In the **Philippines**, where a competition law has just been introduced, the regulator, "the NTC, retains residual powers to regulate rates of tariffs in cases where 'ruinous competition' results or when a monopoly, cartel or combination in adversely affects the public; in such circumstances, the NTC is empowered to establish a 'floor' or 'ceiling' on the rates of tariffs."[72] This appears to be a very interventionist approach by the regulator. Generally speaking, an interventionist approach may lead to over-regulation and micro-management of the telecoms sector, potentially leading to micromanagement by the regulator (see Figure 12).

- **Singapore** has a system of *ex ante* regulation for 'dominant licensees' (i.e, licensees with significant market power), under the terms of the Telecoms Competition Code 2012 (TCC). The regulator can classify a licensee as dominant, when it:

  › is licensed[73] to operate facilities that are sufficiently costly or difficult to replicate such that requiring new entrants to do so would create a significant barrier to rapid and successful entry into the telecommunications market in Singapore by an efficient competitor; or

  › has the ability to exercise significant market power in any market in Singapore in which it provides telecommunications services.[74]

67. See: http://www.comcom.govt.nz/regulated-industries/telecommunications/
68. The Commerce Commission is the competition authority and also the regulator in sectors as diverse as electricity; gas pipelines; dairy products and airports. It also has a remit in consumer protection, to apply fair trading rules and has oversight of consumer credit services. See: http://www.comcom.govt.nz/regulated-industries/
69. Available at: http://202.83.164.29/moit/userfiles1/file/Telecommunications%20Policy%20-2015%20APPROVED.pdf
70. "the Federal Government may make rules...(ad) preventing, prohibiting, and remedying the effects of anti-competitive conduct by licensees...". Pakistan Telecommunications (Re-organization) Act, 1996 (XVII of 1996), § 57(2).
71. NTP § 5.1.2. Under the NTP, the Ministry should use as guidance best practices of markets with comparable competition levels and to develop the new rules within six month (by the end of May). The regulator will then prepare a regulatory framework, to be reviewed by the competition authority, for the application of the MoITT's Competition Rules and for an "orderly transition of remedies." NTP § 5.1.14.
72. Maher M. Dabbah, quoted, pages 391 and 392
73. https://www.ida.gov.sg/-/media/Files/PCDG/Practice%20Guidelines/TCC/2012TCC_wef_2July2014.pdf
74. TCC, section 2.2.1

'Dominant licensees' are subject to a range of *ex ante* obligations under the TCC, such as accounting separation requirements; obligations to file tariffs with the regulator for approval; to provide unbundled services; and to allow resale of end-user services by any licensee. Dominant licensees may also be required to offer certain interconnection and access-related services on terms that are pre-approved by the regulator (the IDA, soon to be IMDA, after the merger between the IDA and the media regulator, MDA), by way of a standardised reference interconnection offer (RIO). As will be seen below, Singapore has a system of exclusive sectoral application of the competition rules.

- In **South Korea,** where the competition authority, the Korean Fair Trade Commission, is a very active competition authority (see the case study in Figure 24 for their early investigation of Google), under the terms of the Telecommunications Business Act,[75] the Ministry of Science, ICT and Future Planning has the duty to conduct an annual assessment of the telecommunications markets[76] and the power to impose obligations on carriers that

  › possesses facilities which are essential to other telecommunications carriers in providing Telecommunications Service; or

  › whose business size, market share, etc. of its Common Service satisfy criteria specified in a Presidential Decree: this provision would apply to carriers with a position of significant market power.

- In **Taiwan**,[77] telecoms operators are classified as Type I or Type II. A Type I telecoms operator is defined as a provider of facilities-based services; Type II services include all other services. The operation of services is subject to a franchise (Type I) or prior approval in the form of a licence (Type II). Fixed-line, submarine cable, mobile phones and satellite telecoms operators are all categorised as Type I telecoms services. Type I operators are subject to *ex ante* regulations, which include interconnection obligations (all interconnection arrangements shall be transparent, reasonable, non-discriminatory, and be entered into on cost-based pricing), separate accounting, non-cross-subsidisation requirements, number portability, and the NCC's prior approval of pricing and service terms. The regulator specifies what Type I operators are 'dominant'. These are subject to further restrictions such as:

  › not to obstruct, through proprietary techniques, either directly or indirectly, requests for interconnection from other Type I service operators;

  › not to refuse to disclose to other Type I service operators their calculation methods for interconnection charges and other relevant materials;

  › not to improperly determine, maintain or change their tariff or methods of offering its telecommunications services;

  › not to reject requests from other Type I service operators to lease network components without due cause;

  › not to reject requests from other telecommunications service operators or users to lease circuits without due cause;

75. Available in English at: http://elaw.klri.re.kr/kor_service/lawView.do?hseq=33562&lang=ENG
76. Arts 34, 35, 39, 41 and 42, TBA. Interestingly, Article 50 outlines a number of regulatory obligations against 'prohibited acts' related to lessening competition (e.g. unfair or discriminatory conditions, service charges for equipment/facilities). These can be dealt with by notification to the regulator and the regulator have the power to conduct investigations and determinations of wrong-doing. In the case of determination of wrong-doing, they can apply remedies (though for wide-ranging remedies the opinion of the Ministry is required).
77. Getting the Deal Through, quoted,

- not to reject requests from other telecommunications service operators or users for negotiation or testing without due cause;
- not to reject requests from other telecommunications operators for co-location without due cause;
- not to discriminate against other telecommunications service operators or users without due cause; and
- not to abuse their dominant market position, and not to engage in any other acts of unfair competition.

Ex ante regulation of 'dominant' companies? A 'competition regulator'?

As seen above, throughout Asia, the terminology in use in Europe and other countries of 'SMP regulation' (significant market power regulation, for asymmetric regulation) is not widespread. Indeed, in countries such as Australia, Malaysia and New Zealand, regulation is based on whether a service is an 'access service', determined to be such by reference to specified criteria that take into account a combination of whether the service is offered through an underlying 'bottleneck facility' or whether access is generally in the interest of consumers, including by reference to the market power of the licensees.

Of the countries surveyed above, only Pakistan uses the SMP terminology. Myanmar, Singapore and Taiwan refer to *ex ante* regulation of 'dominant' companies. This is correct: indeed the definition of significant market power is the same as the definition of dominance (in countries that recognise the difference). However, using this terminology may be confusing in terms of competition policy enforcement, for the following reasons.

Although the definition of 'significant market power' and 'dominance' is the same and the economics tools used for market definition and market assessment are also the same, there are important differences between introducing ex ante regulation and enforcing the ex post prohibition against anticompetitive behaviour.[78] The starting point is different and this often determines a narrower market definition in competition law cases than in SMP regulation. This is because competition law cases often start with a complaint about a particular instance of anticompetitive behaviour whereas regulation considers the market as a whole, with a view to addressing market failures in the system. A narrower market definition often results in more targeted action under competition law. Because the competition authority is considering evidence of a specific instance of anticompetitive behaviour, it can intervene ex post, in markets where *ex ante* intervention (in the absence of a complaint) would not be warranted.

If this distinction is not appreciated (and use of the same word will make it more difficult to appreciate it), there is a risk of confusion, such as occurs when an agency feels that it needs to have determined that a company has SMP (is dominant) before it can investigate a complaint for abuse of dominance. This is not so. Competition law applies to all sectors, and therefore a regulatory determination that a company has SMP (or a regulatory determination that a company is 'dominant' for the purposes of regulation) is NOT a precondition for a

78. This is discussed in the Competition Policy Handbook, quoted, available at: http://www.gsma.com/publicpolicy/wp-content/uploads/2016/04/Competition-Policy-Handbook.pdf. See in particular the following chapters: *How Competition Policy Works Today* and Market Definition, *Key Concept 1, Market Definition in Practice*

competition law investigation. Confusion of this type happens even in countries where the two regimes are called 'SMP regulation' and 'competition law'. To refer to SMP regulation as 'regulation of dominant companies' may confuse regulation with competition law enforcement against abuse of a dominant position. If a competition authority is then referred to as a 'competition regulator', there is further risk of confusion.

The risk of confusion is greater when the regulator is given exclusive powers to apply competition law in the telecommunications sector. Whereas in advanced digital societies the regulator and the competition authority have in place a system for cooperation, in transition and emerging digital societies, the risk of diverging outcomes between the competition law applied to the sector by the regulator and the competition law applied to the economy as a whole by the competition authority is greatest. In the words of the Australian Harper Report:[79]

> *"the culture and analytical approach required to regulate an industry differ from those typically characteristic of a competition law enforcement agency. There is also a risk that an industry regulator's views about the structure of a particular market could influence a merger decision."*

Intergovernmental organisations

Three main regional intergovernmental organisations are active in Asia, namely APT, APEC and ASEAN. Figure 19 provides an overview of membership of these organisations. As shown there, seven countries (namely **Brunei Darussalam**, **Indonesia**, **Malaysia**, **the Philippines**, **Singapore**, **Thailand** and **Vietnam**) are members of all three organisations, raising the intriguing prospects that these countries could act as a conduit for best practice and know-how through the three regional organisations, leading to further coordination across Asia.

Overall, within each organisation, initiatives are in place that should lead to better regional coordination of regulatory regimes and a regional response to cross-border issues. The weakness in the case of all three organisations is that they "rely on a 'soft law' approach to consensus-building in order to mitigate political tensions among members. The non-binding nature of this approach often affects timely delivery or limits the efficacy of their initiatives."[80]

79. Harper Report, quoted.
80. GSMA The Mobile Economy, Asia Pacific 2016, page 60. https://www.gsmaintelligence.com/research/2016/06/the-mobile-economy-asia-pacific-2016/565/

Figure 21: ASEAN, the Association of South East Asian Nations

Members: Brunei Darussalam, Cambodia, Indonesia, Laos, Malaysia, Myanmar, the Philippines, Singapore, Thailand and Vietnam. This membership comprises a very divergent group of countries, making the goal of economic integration difficult to achieve.

History: ASEAN was created in 1967 as a regional organisation comprising countries in Southeast Asia.[81] In 2015, the ASEAN countries created the ASEAN Economic Community. The stated aim[82] is to have by 2025 an AEC "highly integrated and cohesive; competitive, innovative and dynamic; with enhanced connectivity and sectoral cooperation; and a more resilient, inclusive, and people-oriented, people-centred community, integrated with the global economy."

Cooperation in the ICT sector: The members of the AEC continue to organise cooperation in the ICT sectors through the 2000 e-ASEAN Framework Agreement and the 2007 Economic Community Framework. Initiatives taken in the ICT sector are steered by the ASEAN Telecommunications and IT Ministers (ASEAN-TELMIN) responsible for ensuring that a pan-regional ICT sector is developed through the AEC initiative.[83] To date, ASEAN has not created cross-sector channels linking telecommunications with other sectors (e.g., finance) at a working level.

Earlier ASEAN regulatory reform proposals (e.g., ASEAN ICT Masterplan 2011-2015) have had some concrete results.[84] ASEAN has adopted a new Masterplan for the period 2016-2020. Other initiatives have suffered from the limitations of ASEAN's multilateralism based on principles of non-interference, minimal institutionalisation, consultation, consensus and non-confrontation, with limited mechanism for ensuring compliance at the national level.[85]

More established ASEAN regional engagement has resulted in concrete results in the liberalisation of sectors such as aviation and finance, and to the lowering of tariff barriers. These could provide a precedent for the often mooted ASEAN Single Telecommunications Market, which would represent a major step towards the growth of a regional digital society.

81. For a history of ASEAN, see: http://asean.org/asean/about-asean/history/
82. http://asean.org/asean-economic-community/
83. GSMA, *Capitalising on ASEAN's Mobile Moment: Effective Mobile Policy and Regulation for the ASEAN economic community*, page 5, at: http:/, Digital Societies Report/www.gsma.com/aboutus/wp-content/uploads/2013/08/Capitalizing_on_ASEAN%E2%80%99s_Mobile_Moment_24ppWEB.pdf
84. The AIM 2015 completion report noted that some 87 projects had been completed. Nearly 50% of the available budget went to infrastructure development and bridging the digital gap, reflecting ASEAN's emphasis on connectivity and digital societies. See GSMA Digital Societies Report, quoted, pages 42 and 43.
85. This is dubbed 'the ASEAN way': see GSMA Digital Societies Report, quoted, pages 42 and 43

Figure 22: APEC, Asia-Pacific Economic Cooperation

Members: APEC refers to members as 'member economies', to emphasise the economics nature of their cooperation. The organisation includes a number of member economies in the Americas (Canada, Chile, Mexico Peru and the USA) and Russia, as well as the countries listed in Figure 19, namely: Australia, Brunei Darussalam, Chinese Taipei, China, Hong Kong, Indonesia, Japan, Korea Malaysia, New Zealand, Papua New Guinea, the Philippines, Singapore, Thailand and Vietnam.

Participation in APEC dialogue and fora is open to member economies, partnering regional organisation (e.g., OECD) and, in some cases, private-sector players, through the APEC Business Advisory Council (ABAC).

History: APEC was founded in 1990. In 2014, the members agreed on an APEC Accord on Innovative Development, Economic Reform and Growth and to concretise their vision of a Free Trade Area of the Asia-Pacific.[86]

Cooperation in the ICT sector: APEC's main focus of activity is the promotion of trade and economic growth in Asia-Pacific, through funding of specific projects and reducing trade barriers between members, harmonizing standards and regulations, and streamlining customs procedures for easier movement of goods across borders.

APEC Telecommunications and Information Working Group (TEL) focusses on the pre-conditions for a digital society, namely connectivity and technological development. TEL has the aim to ensure affordable access to ICT services and the internet. TEL conducts its work programmes through three main steering groups, the Liberalisation Steering Group, the ICT Development Steering Group and the Security and Prosperity Steering Group. The ICT Development Steering Group undertakes projects such as, currently, on Next Generation Networks (led by Japan), on IoT (led by China) and on TV Whitespaces (led by Singapore). Mutual recognition arrangements for technical equipment are considered by a special Task Force (MRATF).[87]

APEC has created an Ad-Hoc Steering Group on the Internet Economy (AHSGIE). This sits above existing committees and reports directly to the Senior Officials' Meeting (SOM). The group brings together different working groups within APEC and its remit is to focus on platforms such as e-identity, e-payments, cloud computing and cross-border data flows. For these purposes, it brings together the telecommunications and financial sectors.[88] This is an important step towards a more holistic regulatory approach for the digital society.

86. http://www.apec.org/About-Us/About-APEC/History.aspx
87. http://www.apec.org/Home/Groups/SOM-Steering-Committee-on-Economic-and-Technical-Cooperation/Working-Groups/Telecommunications-and-Information
88. GSMA, The Mobile Economy Asia Pacific 2016, quoted, page 60. See also the GSMA Digital Societies Report, 2016, quoted, pages 44, 45, 46.

Figure 23: Asia-Pacific Telecommunity

Members: APT's membership is the most comprehensive, bringing together all the countries listed in Figure 19.

History: APT was founded in 1979, on the joint initiatives of the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP) and the International Telecommunications Union (ITU). APT is an intergovernmental organisation that operates in conjunction with telecoms service providers, manufacturers of communications equipment, and research and development organisations active in the field of communication, information and innovation technologies.

Cooperation in the ICT Sector: APT's focus is entirely on the development of telecommunications services and information infrastructure throughout Asia Pacific. APT assists members in the preparation of Global conferences such as the ITU Plenipotentiary Conference (PP), the World Telecommunications Development Conference (WTDC), the World Radiocommunication Conference (WRC), the World Summit on the Information Society (WSIS), the World Telecommunications Standardization Assembly (WTSA) and the ITU meetings. The APT is also involved in promoting regional harmonisation of their programmes and activities in the region.[89]

Specifically, APT advocates the harmonisation of spectrum assignment to bring about economies of scale for the cost of mobile broadband equipment and devices and to enable greater interoperability and international roaming between networks.[90] It is the only regional body in Asia through which submissions and opinions can be officially relayed to conferences such as WRC , on behalf of the APAC region. The important role of APT in achieving global harmonisation for use of the 700 MHz band for mobile broadband is explained below.

89. http://www.aptsec.org/
90. GSMA, Mobile Economy Asia Pacific 2016, page 60

Competition Law

One important element of a regulatory regime that supports change and innovation is that regulation should only be introduced when competition law is not sufficient to deal with the issues identified. For this to be a reality, it is important not only that there should be a competition authority properly functioning in a country but also that the relative jurisdiction of the competition authority and the regulator should be clear and, whether they are clear or not, that the authorities and the regulators should be able to cooperate. A properly functioning, well-resourced competition authority and an understanding of the role played by cooperation between agencies are both features of advanced societies in Asia. International cooperation under the umbrella of ASEAN in particular is becoming a reality.

National laws

Competition law includes the prohibition to engage in anti-competitive agreements and to abuse a dominant position, and merger control. Merger control in the telecommunications sector is an area that requires extra cooperation between the competition authority and the regulator and is dealt with separately below.

Asia Pacific is very diverse when it comes to the application of competition law. Indeed, the great diversity of regimes — from the substantive prohibitions to the level of economic and legal sophistication, and to the approach to enforcement — can be an issue. Asia Pacific includes jurisdictions with some of the most established competition laws, enforced by well-resourced and very competent competition authorities (as in **Australia**, **Japan**, **New Zealand**, **Singapore**, **South Korea** and **Taiwan**); jurisdictions with very recently introduced competition laws where nevertheless enforcement is gaining momentum (as in **China**, **Malaysia** and **Hong Kong**); countries where the competition authority has put substantial efforts in the application of the competition rules (as in **India**, where the current competition authority only started to operate in 2009, and **Indonesia**[91] where, notwithstanding continuing difficulties with enforcement, the competition authority's credibility is on the ascent); countries where there is a competition law but enforcement is not as extensive as it could be (as in **Thailand**, **Bangladesh**, **Laos** and **Vietnam**); countries that have just adopted a competition law (as in the **Philippines**, **Brunei** and **Myanmar**); to countries where in fact there is as yet no competition law at all (**Cambodia**). **South Korea** remains one of very few countries to have completed a competition law investigation on a complaint against Google, as illustrated in Figure 24. Indeed, according to recently published statistics,[92] during the first half of 2016 alone, competition authorities in East Asia imposed fines totalling US$750million. South Korean authorities imposed fines totalling US$666.5

91. See Figure 33 for a case study concerning spectrum assignment practices in Indonesia.
92. See the report by the law firm Norton Rose Fullbright, *Competition law developments in East Asia*, available at: , http://www.nortonrosefulbright.com/knowledge/publications/140901/competition-law-developments-in-east-asia-june-2016

million in 25 cases, followed by Japan's US$67.1 million and Indonesia's US$11.3 million. China imposed the second highest ever imposed fine for breach of the competition rules (see Figure 26). Given these levels of competition law enforcement, it is clear that competition law plays a fundamental role across all sectors of the economy. Emerging and transition societies in particular should take notice of the effects of competition on welfare for the economy as a whole (see Figure 5) and consider a holistic approach towards achieving the right balance between regulation and competition.

No opinion as to the effectiveness or correctness of competition law enforcement

Throughout this booklet, we do not express any views as to whether the cases considered show a fair or good level of competition law enforcement. The selected cases show how competition law, properly understood and enforced, can be used to deal with issues of alleged abuse of a dominant position and to deal with merger control effectively. This reinforces the contention that more reliance on competition law should permeate the telecommunications sector, leading to regulatory forbearance.

Figure 24: South Korea probes Google Android

South Korea: Google Android Anti-Trust Probe
Years: 2011-13
Authority: Korean Fair Trade Commission (KFTC)

Legislative and Regulatory Framework:

Monopoly Regulation and Fair Trade Act (No. 11119, amended 2 Dec. 2011). Section 3-2.5, prohibiting dominant firms from unfairly excluding competitors, and Section 4.2, setting the threshold market share for presumption of single market dominance at 50 percent.

Chronology:

- April 2011: search engine operators Daum and NHN file complaints against Google, alleging unfair trade practices related to pre-loading of Google software on Android phones.
- September 2011: KFTC raided Google's Seoul offices.
- January 2012: KFTC accused Google of obstruction of investigations.
- May 2012: KFTC conducts a second raid of Google's Seoul office.
- July 2013: KFTC ended its probe on the narrow question whether Google had acted anti-competitively by pre-loading their search engine on Android phones.
- July 2016. Reports circulated that the KFTC was looking into opening a new investigation over whether Google had abused its dominance in the mobile operating system market more generally, to prevent the development and use of rival operating systems.
- October 2016: during a parliamentary review of the KFTC, the KFTC indicated that the matter will be re-opened due to changed market conditions.

Figure 24: South Korea probes Google Android

Background:

KFTC launched an anti-trust investigation into Google's Android business practices in spring 2011, following formal complaints to the commission from South Korea's two largest search engine operators.[93] While Daum and NHN held a combined 90 percent share of the computer search engine market in 2011, they claimed abuse of dominance by Google in its deployment of Android systems, alleging that Google forced phone manufacturers to pre-load only Google applications on their devices and delayed the production from equipment makers that did not comply. Nearly 70 percent of South Korean smartphones used the Android operating system at the time, and Google's competitors feared a lock-out of their search engine applications from those devices.[94] With Google search engine set as the default, NHN and Daum faced a more difficult task in acquiring mobile users.

The KFTC conducted raids of Google's Seoul office in September 2011 and again in May 2012. In January 2012, the KFTC accused Google of interfering with the raids by encouraging employees to work from home those days and to delete potentially problematic files. Google denied the accusations and vowed to cooperate fully with the commission's investigation.[95]

In July 2013, the KFTC ended its investigation after concluding that the claimed business practices had a "very small" impact on the search engine market. Noting that Google's market share had actually declined over those two years, the KFTC found it unlikely that the company's actions would be anti-competitive practices.[96] KFTC also pointed out that consumers could easily access other search engines on the Android system.[97]

Analysis:

The case presented the question of how to define market dominance. Google's Android is the main operating system in South Korea but the bundling of the search engine with the device seemingly had no effect on Google's market power in the search engine market. Google only held about 10 percent of the search engine market in South Korea at the commencement of the investigation, and, by the time of the conclusion of the investigation, its market share had not significantly changed. Indeed, KFTC relied on the online search engine's small market share and its consistency over time in making a determination of no finding.

The case is also interesting because it illustrates the possibility for a competition authority to close a case in the absence of compelling evidence of anticompetitive practices, but then being able to re-open it at a later stage if more evidence comes to light or if market conditions change.

93. *See* Matt Brian, "Google accused of blocking third-party Android search apps in Korean antitrust complaints," The Next Web, 15 Apr. 2011, *available at* http://thenextweb.com/google/2011/04/15/google-accused-of-blocking-third-party-android-search-apps-in-korean-antitrust-complaints/#gref.
94. *See* Song Jung-a, "Google faces S Korea antitrust complaint," Financial Times, 15 Apr. 2011, *available at* http://www.ft.com/cms/s/2/87d15ac0-673d-11e0-9bb8-00144feab49a.html#axzz4JCDxlgx1.
95. John Paczkowski, "South Korea Says Google Impeded Antitrust Probe," All Things Digital, 9 Jan. 2012, *available at* http://allthingsd.com/20120109/s-korea-says-google-impeded-antitrust-probe/; John Paczkowski, "Korea Fair Trade Commission Raids Google. Again." All Things Digital, 30 May 2012, *available at* http://allthingsd.com/20120530/korea-fair-trade-commission-raids-google-again/.
96. Charlie Osborne, "South Korea eyes up Google over antitrust laws, again," ZD Net, 12 Aug. 2016, *available at* http://www.zdnet.com/article/south-korea-eyes-up-google-over-antitrust-laws-again/.
97. Youkyng Lee, "South Korea's fair trade commission clears Google after 2-year probe," NBC News, 18 Jul. 2013, *available at* http://www.nbcnews.com/business/south-koreas-fair-trade-commission-clears-google-after-2-year-6C10669675.

In **China**, although competition law was only introduced in 2008, enforcement is increasing.[98] Indeed, the existing case law shows that the authorities are willing to use competition law to deal with perceived issues in the telecoms sector involving state-owned companies. Figure 25 provides details of the 2012 investigation of China Unicom and China Telecom. According to published sources[99], SIAC has announced further reviews of the telecommunications sector.

Figure 25: China investigates telcos

China: NDRC's First Investigation of State-Owned Enterprises
Years: 2011-2012
Authority: National Development Reform Commission ("NDRC")

Legislative and Regulatory Framework:

- Anti-Monopoly Law (promulgated by Order No. 68 of Aug. 30, 2007, of the President of the People's Republic of China) ("AMLaw").[100] Article 17.6, prohibiting abuse of dominance for differential pricing without justifiable reasons. Article 19, establishing presumption of collective dominant market position of two firms where both together hold a joint market share of more than two-thirds and each holds a market share of at least one-tenth.
- NDRC Regulations against Price Fixing (promulgated by Order No. 7 of Dec. 29, 2010, of NDRC). Amongst others, clarifying AML's rules for evaluating justifiable reasons for price discrimination.

Chronology:

- April 2011. NDRC initiates investigation of state-owned enterprises (SOEs) China Telecoms Corporation Limited ("China Telecom") and China United Network Communications Corporation Limited ("China Unicom").
- November 2011. NDRC publicly confirms the investigation.
- December 2011. China Telecoms and China Unicom submit commitments to the NDRC to deal with the allegations of price discrimination between customers, together with an application for a suspension of the investigation.
- February 2012. Each company submitted updated commitments, after NDRC rejects previous plans as too vague.
- March 2012. NDRC Anti-Monopoly Bureau Deputy Director notes progress in the companies' efforts to meet NDRC's concerns but insists investigation will continue.
- February 2014. Head of Bureau of Price Supervision and Anti-Monopoly announces at a press conference that the NDRC is still assessing whether China Telecoms and China Unicom had met their commitment obligation.

98. There are three competition authorities in China, namely MOFCOM for merger control and NDRC and SIAC for pricing and non-pricing anticompetitive behaviour. As seen in Figure 25, this can result in confusion about the jurisdiction of the different authorities.
99. The Guangdong Administration for Industry and Commerce, or AIC, launched "five investigations into anti-competitive conduct, including two administrative monopoly cases, and two cases of abuse of market dominance by China Mobile and China Unicom", *China Mobile, China Telecoms under anti-trust investigation in Guangdong Province*, mLex, subscriber service, 21 June 2016
100. Passed after 11 years of debate and enacted in 2008. Establishing guidelines for prosecution of monopoly agreement and abuse of dominant position investigations and for the imposition of penalties.

Figure 25: China investigates telcos

- Unusually, two government official media, CCTV and the People's Post – Telecommunications Daily ('PPTD'), expressed different views as to the NDRC decision. The CCTV was broadly in favour whereas the PPTD considered that price regulation should be left to the telecoms regulator, the Ministry of Industry and Information Technology ('MIIT').
- Present (as of October 2016). The investigation has been suspended, but it is not yet known whether it will resume, or if it has in fact been terminated.

Background:

In April 2011, the NDRC initiated an investigation into China Telecoms and China Unicom, alleging abuse of dominance by the two state-owned enterprises ("SOE"). According to complaints, the companies, each of whom offer both retail and wholesale broadband access services, charged discriminatory prices (higher prices) for backbone broadband network access to their competitors, violating AMLaw prohibition against price discrimination without legitimate reason. This was the first investigation by Chinese anti-monopoly authorities of any large SOE since the implementation of the AMLaw three years earlier.

The NDRC's public announcement in November 2011 of the investigation marked a departure from the typical process for anti-monopoly investigations in two manners. Firstly, such large-scale anti-monopoly cases had been prosecuted primarily by the Ministry of Commerce ("MOFCOM") and the State Administration for Industry and Commerce ("SAIC") up to that time. The NDRC had signalled its intent to engage more actively in anti-monopoly matters in the midst of, but before the announcement of, its China Unicom/China Telecoms investigation through the addition of three new divisions under the Price Supervision and Anti-Monopoly Bureau and an increase in its staff from 26 to 46 during the summer of 2011.[101] Secondly, such investigations had not typically been officially announced until a final decision had been reached.

Following the public announcement, China Telecoms and China Unicom submitted commitments to the NDRC in December 2011, pledging to lower prices and improve service speeds.[102] After the NDRC replied that the plans did not offer concrete enough terms, both firms offered new plans in February 2012. The Commission then reportedly gave China Telecoms and China Unicom three to five years to implement their plans, including lowering access prices by 35 percent and guaranteeing increased speeds.[103]

The NDRC has purportedly suspended the investigation and will issue no fine,[104] but as recently as February 2014, the head of the Bureau of Price Supervision and Anti-Monopoly stated at a press conference that the Commission continued to assess China Telecom's and China Unicom's progress in amending their business practices. As of August 2016, the NDRC has made no announcement of termination of the investigation.

101. Susan Ning *et al.*, "NDRC Demands More Concrete Pledge from China Telecom," China Law Insights, King & Wood Mallesons, *available at* http://www.chinalawinsight.com/2011/12/articles/corporate/antitrust-competition/ndrc-demands-more-concrete-pledges-from-china-telecom/.
102. Announcement, China Telecoms Corporation Limited, Press Release, 9 Nov. 2011, *available at* http://www.chinatelecom-h.com/en/announcements/announcements/a111202.pdf.
103. "Telecoms & Media in China," GTDT: Market Intelligence, Law Business Research, Vol. 2 Issue 4, 26-27 (2015).
104. *See* "China," Cartels & Leniency 2016, International Comparative Legal Guides, 22 Nov. 2015, *available at* http://www.iclg.co.uk/practice-areas/cartels-and-leniency/cartels-and-leniency-2016/china; Thomas K. Cheng, "Competitive Neutrality from an Asian Perspective," Note, Roundtable on Competition Neutrality, Organisation for Economic Co-operation and Development, 11 June 2015, *available at* http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=DAF/COMP/WD(2015)49&docLanguage=En.

Figure 25: China investigates telcos

Analysis:

- Substance
  - Up to the announcement of this investigation, commentators questioned whether the application of the AML would be skewed towards investigations of foreign entities. The launch of this investigation signalled for the first time that the NDRC intended to apply its authority to SOEs.
  - The guidelines for determining unreasonableness of discriminatory pricing differ between the anti-monopoly regulatory authorities. NDRC's Regulations against Price Fixing included a list of allowances for otherwise prohibited conduct, such as to ensure the products' quality and safety, to preserve brand reputation and to reduce costs or increase efficiency for the benefit of consumers.[105] The SAIC's rules, on the other hand, direct investigators to consider whether the practice reflect usual operations for the benefits of the company and how the practice affects economic efficiency and growth and the public interest.[106]
  - This case brings out the difficulties that arise in the overlap between competition law and regulation (explained above, see Figure 13). The MIIT is the professional regulator for the prices of broadband but the competition authority, the NDRC, retains the ability to investigate pricing generally.[107]
- Transparency
  - As of August 2016, the NDRC has not publicly concluded its investigation. Article 45 of the AMLaw states that the regulatory authority "may" suspend its investigation if the company under investigation submits a commitment plan, in which case the authority "shall" oversee the company's fulfilment of its committed obligations. Article 45 also states that the authority "may" terminate the investigation once it finds the company to have fulfilled its commitments, but the Commission is under no legal obligation to publish its decisions or the terms of any potential commitments. Article 44 of the AMLaw establishes that, in the event of a finding of monopolistic conduct, the relevant authority "shall" make a decision as to how to deal with it but "may" make that decision known to the public. Accordingly, the industry and the public may only speculate as to the current status of the NDRC's investigation, including whether it continues.

105. *See* NDRC Rules, Article 16.
106. SAIC Regulations on the Prohibition of Abuse of Dominant Position (promulgated by order No. 54 of Dec. 31, 2010, of the SAIC), Article 8.
107. This issue is explained in detail in the Competition Policy Handbook, quoted, Assessing Market Power in the Digital Age, Key Concept 9, Leveraging of Market Power.

Figure 25: China investigates telcos

Areas for consideration:

The NDRC should consider clarifying through its regulations what constitutes legitimate reasons for price discrimination, offering companies clear guidelines as to what pricing practices they may implement.

The NDRC should also consider publication of its decisions at the conclusion of investigations and announcement of suspensions and terminations of investigations so that companies operating in China have a clearer idea of what to expect from anti-monopoly investigations and so that the relevant industry and the public are able to assess the status of the companies being investigated. Investigations and announcement of suspensions and terminations of investigations so that companies operating in China have a clearer idea of what to expect from anti-monopoly investigations and so that the relevant industry and the public are able to assess the status of the companies being investigated.

Also in **China**, the competition authority has imposed the second highest penalty ever, for abuse of a dominant position (Figure 26).

Figure 26: China imposes second highest fine ever for abuse of a dominant position

China: NDRC imposes Highest Fine to date
Years: 2013-15
Authority: National Development Reform Commission (NDRC)

Legislative and Regulatory Framework:

- Anti-Monopoly Law (promulgated by Order No. 68 of Aug. 30, 2007, of the President of the People's Republic of China) ("AMLaw").
- NDRC Regulations against Price Fixing (promulgated by Order No. 7 of Dec. 29, 2010, of NDRC). Amongst others, clarifying AMLaw's rules for determining fines for abuse of dominant position.
- NDRC Procedural Provisions on Administrative Law Enforcement against Price Monopoly (promulgated by Order No. 8 of Dec. 29, 2010, of NDRC). Amongst others, including AMLaw's rules for permitting a company to apply for administrative review or appeal for judicial review by the courts against a decision by the Commission.

Chronology:

November 2013. The NDRC commences its investigation of Qualcomm's practices, conducting dawn raids of Qualcomm's Beijing and Shanghai offices.

February 2014. The NDRC publicly announces its investigation into Qualcomm.

- February 2015. The NDRC issues its decision, imposing a fine of 6.088 billion yuan (approximately $975 million), and Qualcomm agrees to alter its patent licensing practices.

Figure 26: China imposes second highest fine ever for abuse of a dominant position

Background:

In November 2013, the NDRC commenced an investigation into the business practices of Qualcomm in China, asserting that Qualcomm had abused its dominant position and overcharged customers through its licensing terms.[108] The NDRC initiated its investigation based on complaints that Qualcomm (i) bundled patent licences with the purchase of chips that those customers used in their wireless devices, (ii) set royalty rates too high for those patent licences and that (iii) the licensing terms were unfair.[109]

Under Article 47 of the AMLaw, in an abuse of dominance case the NDRC holds the authority to impose fines of up to 10 percent of the company's total revenue in China in the previous financial year. Qualcomm's 2013 revenue in China was about $12.3 billion.[110] The NDRC's fine amounted to 8 percent of that, or approximately $975 million, a sum significantly greater than all fines imposed by the NDRC in 2014 combined.[111] This represents the largest anti-monopoly fine ever imposed in China and is the second largest single anti-monopoly fine imposed against a company by any competition authority in the world, falling just behind the €1.06 billion fine by the European Union against Intel Corporation in 2009.[112]

In addition, Qualcomm also consented to changing key elements of its patent licensing business model. It agreed, among other things, to offer its 3G and 4G essential patents separately from its other patents and to provide patent lists to its customers during initial negotiations. It also agreed to use in its pricing a royalty base of 65 percent of the net price of the device in which the chips are used.[113] Qualcomm announced that it would pay the fine.[114]

Analysis:

- Jurisdiction
    - › Both the SAIC and the NDRC have taken IP-related anti-monopoly cases. The SAIC holds jurisdiction over non-pricing-related abuse of dominance and monopolistic practices, while the NDRC oversees investigations of pricing-related abuse of dominance and monopolistic practices. However, the jurisdictional separation is not defined within the AMLaw, but rather is determined, per Article 10 of the AML, by the State Council, with lack of clarity in cases of overlapping subject matter. Given the differences between the agencies' implementing guidelines, this certainly matters. For example, the NDRC's rules provide for immunity from fines for the first

108. The investigation and the fines have attracted some criticism. For example, that Chinese authorities began investigating information technology firms such as Qualcomm (which manufactures chips for use in mobile wireless equipment) in order to lower costs in advance of the launch of 4G mobile network services in China in 2014. See: Kevin Yao and Matthew Miller, "China accuses Qualcomm of overcharging, abusing dominance," Reuters, 19 Feb. 2014, *available at* http://www.reuters.com/article/us-china-ndrc-idUSBREA1I0A820140219.
109. *See* Bureau of Price Supervision and Anti-Monopoly, People's Republic of China National Development and Reform Commission Administrative Penalty Decision, Qualcomm Incorporated, [2015] No. 1 (hereafter "NDRC Decision"), *available at* http://www.ndrc.gov.cn/gzdt/201503/t20150302_666209.html.
110. Yao and Miller, *supra* note 1.
111. In 2014, all fines issued by the NDRC totalled about $300 million.
112. *See* Stephanie Bodoni, "Intel Fights Record $1.2 Billion Antitrust Fine at Top EU Court," Bloomberg Technology, 21 June 2016, *available at* http://www.bloomberg.com/news/articles/2016-06-21/intel-fights-record-1-2-billion-antitrust-fine-at-top-eu-court; Noah A. Brumsfield *et al*, "China imposes record fine of approx. US$975 million (€863 million) under its Anti-Monopoly Law," White & Case LLP, Lexology, 14 Feb. 2015, *available at* http://www.lexology.com/library/detail.aspx?g=0af93c61-9f5d-4ed4-b49a-f040c34f9ef9.
113. "Qualcomm and China's National Development and Reform Commission Reach Resolution," Qualcomm, Press Release, 9 Feb. 2015, 1, *available at* http://files.shareholder.com/downloads/QCOM/3864235320x0x808060/382E59E5-B9AA-4D59-ABFF-BDFB9AB8F1E9/Qualcomm_and_China_NDRC_Resolution_final.pdf.
114. Qualcomm Press Release, *supra* note 6, at 1; "Qualcomm fined CNY 6.1 bln in China competition case," TelecomPaper.com, 9 Feb. 2015, *available at* http://www.telecompaper.com/news/qualcomm-fined-cny-61-bln-in-china-competition-case--1064231.

Figure 26: China imposes second highest fine ever for abuse of a dominant position

firm to report a monopoly agreement and to provide evidence to the NDRC, while the second and subsequent firms to do so may receive a reduction of not less than half of a fine (for the first) and of not more than half of the fine (for the second and subsequent applicants), respectively. The SAIC, however, only provides for immunity to the first to come forward, but to no other firm.

- This uncertain demarcation of jurisdiction can be seen in other cases too. The NDRC also opened an investigation against the licensing practices of US-based Interdigital. The SAIC has opened investigations into Microsoft involving IP rights. Accordingly, both the NDRC and the SAIC claim jurisdiction over such cases. However, the NDRC appears to hold a more prominent role in directing IP-related matters.
- After the conclusion of the Qualcomm investigation in 2015, the SAIC published its rules governing IP anti-trust investigations. The NDRC announced in May 2015 that it would take the lead in drafting the IP Antitrust Guidelines for the State Council's Anti-Monopoly Committee.[115] Nevertheless, the jurisdictional lines remain largely undefined in cases involving pricing- and non-pricing-related claims.

• Substance

- Some speculated that the near-simultaneous investigations into Qualcomm and US-based Interdigital could signal targeting of foreign tech firms.[116] However, the settlement agreement allows Qualcomm to assert its patent and licensing rights in the Chinese market, [117] and since this decision, Qualcomm has entered into a number of agreements with Chinese firms.[118]

• Transparency

- The NDRC's decision explains that the 8 percent fine was based on "the serious nature of the party's abuse of market dominance behaviour, deeper level and longer duration,"[119] but the detailed reasoning still remains unclear. Indeed, as explained by Qualcomm in its 2014 annual US SEC filing, due to "the limited precedent of enforcement actions and penalties under [the AMLaw], it is difficult to predict the outcome of this matter or what remedies may be imposed by the NDRC."[120]

115. Susan Ning et al., Ip & Antitrust — China, King & Wood Mallesons, Global Competition Review, 30 July 2015, *available at* http://globalcompetitionreview.com/know-how/topics/80/jurisdictions/27/china/. These State guidelines have been met by international controversy, particularly in the United States, where government officials and industry players fear that an included essential facilities doctrine could impose heavy restraints on foreign companies, particularly in the telecommunications, pharmaceuticals and energy industries. See Michael Martina, "China antitrust proposals trigger foreign business fears over IP protection," Reuters, 1 Apr. 2016, *available at* http://www.reuters.com/article/us-china-antitrust-idUSKCN0WY4KG.
116. *See* Michael Martina and Xiaoyi Shao, "China's antitrust regulators defend probes; Qualcomm inquiry nearly over," Reuters, 11 Sept. 2014, *available at* http://www.reuters.com/article/us-china-antitrust-idUSKBN0H60J920140911.
117. *See* "Qualcomm Files Complaint against Meizu in China," Qualcomm, Press Release, 24 June 2016, *available at* https://www.qualcomm.com/news/releases/2016/06/23/qualcomm-files-complaint-against-meizu-china. Qualcomm launched a case against Meizu in the Beijing Intellectual Property Court in June 2016, relying on the NDRC's approval of its proposed settlement agreement detailing its licensing practices and terms to hold forth its right to charge and collect royalty fees in licensing agreements. Qualcomm notes that more than 100 other Chinese firms have accepted the terms as amended following the NDRC settlement agreement.
118. *See* "Qualcomm builds momentum in China with Oppo licensing agreement," OnQ, Qualcomm, 1 Aug. 2016, *available at* https://www.qualcomm.com/news/onq/2016/07/31/qualcomm-builds-momentum-china-oppo-licensing-agreement. In 2016, Qualcomm has successfully concluded licensing agreements with "more than 100 Chinese companies," including electronic giants such as Lenovo, Xiaomi, Haier and Oppo, under terms allowed under the 2015 NDRC agreement. According to one analyst, Qualcomm will end financial year 2016 with more than 75 percent of Chinese device manufacturers paying royalties under these licensing agreements. Mike Freeman, "Qualcomm signs another patent license in China," The San Diego Union-Tribune, 8 Aug. 2016, *available at* http://www.sandiegouniontribune.com/news/2016/aug/08/qualcomm-patent-license-china-smartphones/.
119. NDRC Decision, *supra* note 2.
120. Qualcomm Incorporated, Form 10-K, For the Fiscal Year Ended 28 Sept. 2014, United States Securities and Exchange Commission, file no. 0-19528, 26, *available at* http://investor.qualcomm.com/secfiling.cfm?filingid=1234452-14-320&cik=.

Figure 26: China imposes second highest fine ever for abuse of a dominant position

› The AMLaw provides mechanisms for fine mitigation under some of its provisions. For example, Article 46, on monopoly agreements, allows for the mitigation of or exemption from penalties for firms voluntarily reporting anticompetitive conditions in "monopoly agreements" and providing evidence. On the other hand, Article 47, governing abuse of market dominance, provides for no such explicit mitigation or exemptions. Rather, Article 47 merely grants the relevant authority the power to confiscate "illegal gains" and to impose a fine of between 1 and 10 percent of the previous year's turnover in China, and Article 49 directs the authority to consider "factors such as the nature, extent and duration of the violation, to decide the concrete amount of fine." Conversely, Article 52 permits the NDRC to impose harsher fines in the face of a firm obstructing its investigation. The NDRC's regulatory guidelines appear merely to reflect the leniency provisions and fine-setting language of the AML, and the NDRC's decision does not detail its specific considerations for reaching the 8 percent figure and does not mention "illegal gains."

Areas for consideration:

- The NDRC should consider clarifying through regulations its decision-making process for setting fines, particularly in abuse of dominance cases, and should provide greater elaboration in its decisions on how the percentage of the fine was determined. While the AML rules and the NDRC guidelines assert penalties for obstruction of an investigation, no similar provisions or guidance exist to exhibit mitigation for cooperation.
- Given the silence of the AML on the matter, the State Council should consider clarifying the jurisdictions of the competition authorities, providing guidance where investigations may involve both pricing and non-pricing elements. Particularly as IPR-related investigations have been conducted by both the SAIC and the NDRC and as both agencies have drafted or are drafting IPR-related guidelines, jurisdictional certainty would allow firms to understand the process better.

In **Hong Kong**, the new Competition Ordinance came into effect in December 2015. The new Hong Kong Competition Commission had a head start and prior to the entry into force of the law had already issued guidance on how it intends to apply the law, and a leniency programme to encourage disclosure of anticompetitive cartels. For the time being, the prohibition of mergers that substantially lessen competition in Hong Kong, (the Merger Rule in the Competition Ordinance) only applies to mergers which concern one or more parties that own or control, either directly or indirectly, a telecommunications carrier licensee. Merger control is a voluntary notification regime.[121]

In **Malaysia**,[122] the Communications and Multimedia Act 1998 (CMA) contains provisions that prohibit anti-competitive conduct by licensees (*Part VI, Chapter 2, CMA*). Similar to the regime in Singapore, the regulator has exclusive jurisdiction over anti-competitive conduct of licensees under the CMA, as the Competition Act 2010 does not apply to any activity regulated under the

121. Clifford Chance, quoted.
122. Communications: Regulation and Outsourcing Global Guide, Malaysia, Zaid, Ibrahim & Co, http://uk.practicallaw.com/resources/global-guides/communications-guide#tab2_tabsdefault

CMA. The system of enforcement of the competition rules in the telecoms sector therefore works separately from the Malaysia Competition Commission (MyCC), which is the main competition authority in Malaysia under the Competition Act 2010. TAs more particularly described in Figure 28, the substantive competition law provisions of the CMA differ somewhat from that under the Competition Act, which was enacted a little over a decade later, and is based on European competition law. The CMA (enacted in 1998) and the guidelines issued by the sector regulator are more similar to Australia competition law. As also explained in detail in Figure 28, in practice telecoms licensees are subject to merger control whilst merger control does not apply generally to the economy (it applies to the aviation sector). This means that licensees can be subject to scrutiny by the telecoms regulator when they merge but not internet players and others. There has been news that the CMA is being amended, and this may be an opportune time for the communications regulator to bring the substantive competition laws under the CMA more in line with those under the Competition Act.[123]

In **Myanmar,** a competition law was introduced in 2015 and will come into force in February 2017. The law includes the main substantive anti-trust principles, but reportedly is not very clear as regards its exact scope of application (particularly at the border between competition law and regulation) and about the relevant legal tests.[124]

In the **Philippines,** a new competition law was introduced in July 2015 (after several failed attempts in the past). The passing of the law coincides with the creation of the ASEAN economic union: Member States have committed to introduce national competition policy and law by 2015.[125] Prior to the introduction of the Act, the Philippines did not have a comprehensive competition law regime, but there were sector-specific laws dealing with competition. This industry specific approach, leading to a number of diverse laws, meant that competition was not being dealt with equally across all sectors of the economy, leading to inefficiencies, inconsistencies and conflicting policies by different agencies and a general lack of expertise in addressing competition issues. **Brunei's** competition law was also passed in 2015 in compliance with the same ASEAN commitments but is not yet in force. It is "very similar to the Singapore regime, and is understood to include a similar exemption for vertical agreements".[126]

In **Singapore,** like in Malaysia, competition law in sectors such as telecommunications, media, post, gas and electricity is enforced by the industry-specific regulators, as these industry sectors are carved out from the application of the Competition Act. On cross-sectoral competition matters, the competition authority will work with the relevant sectoral regulator to determine which entity is best placed to handle the case in accordance with the legal powers given to each. The Competition Commission and the sector-specific regulators will cooperate and coordinate closely to prevent double jeopardy and to minimise the regulatory burden in dealing with the case.[127]

123. Another sector regulator, the Aviation Commission established in 2015 through the Malaysian Aviation Commission Act 2015, also has competition regulation powers, and the substantive law is modelled on the Competition Act, with the added provisions of merger control through a voluntary system - this is presently the only merger control regime in Malaysia.
124. http://www.allenovery.com/publications/en-gb/Pages/MYANMAR-COMPETITION-ACT.aspx
125. Bird & Bird, quoted.
126. Drew & Napier, *A New Era for Competition Law in the ASEAN region*, available at: https://www.expertguides.com/articles/a-new-era-for-competition-law-in-the-asean-region/arezehbk
127. See the competition authority's Guidelines on the Major Provisions, para. 3.7, at: https://www.ccs.gov.sg/legislation/~/media/custom/ccs/files/legislation/ccs%20guidelines/majorprovisionsjul07final.ashx. See also: https://gettingthedealthrough.com/area/20/jurisdiction/58/merger-control-singapore/

In **Taiwan**, the competition authority, the Taiwan Fair Trade Commission (TFTC) has issued guidelines on the application of competition laws to the telecommunications sector.[128] Mergers "in highly-regulated industries, such as telecommunications and the mass media sector, are still subject to a higher degree of scrutiny and are normally cleared with conditions".[129]

Thailand[130] was an early adopter of competition law, as the Thai Competition Act came into force in 1999. The Trade Competition Commission, chaired by the Minister of Commerce has the task to enforce it. Although the TCC has issued guidelines concerning cartels, abuse of a dominant position, and anti-monopoly or a lessening of competition, there are very few reported cases. No detailed regulations for merger control have yet been issued.[131]

Efforts are being made to modernise competition laws in some countries. In **Singapore**, where competition law was introduced as early as 2004, in November 2016 the Competition Commission announced the publication of a set of fully revised competition guidelines intended to streamline its competition practices, in line with best international precedent simplifying compliance and clarifying certain aspects, such as the way that fines are calculated.[132] **Australia** has a well-established system of competition law, both at the state level and at the federal level. Yet the Government has commissioned a panel review of the application of competition policy in Australia, resulting in the publication of the so-called Harper Report in 2015 (Figure 27).

Figure 27: Australia, Harper Report

In March 2015 a panel chaired by Ian Harper published the Harper Review report,[133] following the Government's request that he conduct a 'root and branch' review of Australia's competition laws. The report made sweeping recommendations to Australia's state and national competition laws. The government provided its response to the final report in late November 2015, supporting many of the recommendations and indicating it will provide monetary support to states that take up some of the recommendations it supports.[134]

In the context of a federal State such as Australia, the Harper Report notes "the importance of an agreed framework [for competition policy], which can then be applied by governments in their own jurisdictions and adapted to local conditions as necessary." This interesting observation can be applied to any supra-national intergovernmental organisation seeking to adopt a common framework. Another interesting observation for the telecommunications industry is the recognition that priorities change as technology changes. The example given in the Australian context is that the development of the state-owned National Broadband Network (NBN) and mobile telephony infrastructure "have meant that access to the 'unbundled local loop' (i.e., the copper network) is a less significant issue than it was in 1995."

Below are the salient recommendations that are of special interest in the context of this Booklet. Appendix A to the Harper Report comprises "Model Legislative Provisions" for competition law.

128. Clifford Chance, quoted
129. Clifford Chance, quoted
130. See Figure 32 for a case study on a recent spectrum auction in Thailand that lead to a potential new entrant, Jasmine, defaulting, forfeiting its licence and paying a fine.
131. Clifford Chance, quoted
132. Published on 1 November 2016. See: http://www.mlex.com//Attachments/2016-11-01_X168W2232Q874E25/ccs%20media%20release%20-%20revised%20guidelines%201%20nov%202016.pdf
133. http://competitionpolicyreview.gov.au/final-report/
134. Bird & Bird, quoted.

Figure 27: Australia, Harper Report

Recommendation 1 - Competition Principles

- Government policy and regulations should not restrict competition, unless (i) the benefits of the restriction to the community as a whole outweigh the costs; and (ii) the objectives of the legislation or government policy can only be achieved by restricting competition.
- Government business activities that compete with private provision, whether for-profit or not-for-profit, should comply with competitive neutrality principles to ensure they do not enjoy a net competitive advantage simply as a result of government ownership.
- A right to third-party access to significant bottleneck infrastructure should be granted provided that it would promote a material increase in competition in dependent markets and would promote the public interest.

Recommendation 6 - Intellectual property review

- An overarching review of intellectual property should be undertaken, to be a 12-month inquiry and focus on competition policy issues in intellectual property arising from new developments in technology and markets; and the principles underpinning the inclusion of intellectual property provisions in international trade agreements.

Recommendation 8 - Regulation review

- All Australian governments should review regulations, including local government regulations, in their jurisdictions to ensure that unnecessary restrictions on competition are removed. There is a specific Recommendation 10 that a priority area for review should be all regulations that restrict numbers of taxi licences and competition in the taxi industry, including from ride-sharing and other passenger transport services that compete with taxis.
- Legislation (including Acts, ordinances and regulations)[135] should be subject to a public interest test and should not restrict competition unless it can be demonstrated that: (i) the benefits of the restriction to the community as a whole outweigh the costs; and (ii) the objectives of the legislation can only be achieved by restricting competition.

Recommendation 30 - Misuse of market power[136]

- Misuse of market power should prohibit a corporation that has a substantial degree of power in a market from engaging in conduct if the proposed conduct has the purpose, or would have or be likely to have the effect, of substantially lessening competition in that or any other market.
- To mitigate concerns about inadvertently capturing pro-competitive conduct, the legislation should specify that when determining whether conduct has the purpose, effect or likely effect, of substantially lessening competition in a market, regard must be had to: (i) the extent to which the conduct has the purpose, effect or likely effect of increasing competition in the market, including by enhancing efficiency, innovation, product quality or

135. A separate Recommendation 9 focuses on the potential for planning and zoning legislation to be anticompetitive
136. The proposals seem to mirror the European model relating to the prohibition of abuse of dominance.

Figure 27: Australia, Harper Report

price competitiveness; and (ii) the extent to which the conduct has the purpose, effect or likely effect of lessening competition in the market, including by preventing, restricting or deterring the potential for competitive conduct in the market or new entry into the market.

Recommendation 31 — Price discrimination

- There is no need for a specific prohibition on price discrimination. Where price discrimination has an anti-competitive impact on markets, it can be dealt with by the general competition law.
- International price discrimination should be addressed through market solutions that empower consumers. These include removing restrictions on parallel imports (Recommendation 13) and ensuring that consumers are able to access the cheaper (legitimate) goods.

Recommendation 35 — Mergers

- The competition authority (ACCC) should be the decision-maker at first instance.
- The ACCC should be empowered to authorise a merger if it is satisfied that the merger does not substantially lessen competition or that the merger would result, or would be likely to result, in a benefit to the public that would outweigh any detriment.
- The formal process should be subject to strict timelines that cannot be extended except with the consent of the merger parties.
- Decisions of the ACCC should be subject to review by the Australian Competition Tribunal under a process that is also governed by strict timelines.
- Merger review processes and analysis would be improved by implementing a program of post-merger evaluations, looking back on a number of past merger decisions to determine whether the ACCC's processes were effective and its assessments borne out by events.

Recommendation 42 — National Access Regime (does not apply to telecoms sector)[137]

- Third-party access to infrastructure should only be mandated where it is in the public interest. To that end: (a) access on reasonable terms and conditions through declaration should promote a substantial increase in competition in a dependent market that is nationally significant; (b) it should be uneconomical for anyone (other than the service provider) to develop another facility to provide the service; and (c) access on reasonable terms and conditions through declaration should promote the public interest.
- The Australian Competition Tribunal should undertake merits reviews of access decisions, while maintaining suitable statutory time limits for the review process.

Recommendation 43 — Australian Council for Competition Policy — Establishment

- A new Australian Council for Competition Policy (ACCP) should be established to provide leadership and drive implementation of the evolving competition policy agenda.

137. The access regime applicable to telecommunications in Australia is briefly described above, Regulation, National Laws. This notwithstanding, the recommendation is sensible and there is no reason why the same considerations should not apply to all access regimes, including in telecommunications.

Figure 27: Australia, Harper Report

Recommendation 44 — Australian Council for Competition Policy — Role:

- advocacy, education and promotion of collaboration in competition policy;
- independently monitoring progress in implementing agreed reforms and publicly reporting on progress annually;
- identifying potential areas of competition reform across all levels of government;
- making recommendations to governments on specific market design issues, regulatory reforms, procurement policies and proposed privatisations;
- undertaking research into competition policy developments in Australia and overseas; and
- ex-post evaluation of some merger decisions.

Recommendation 45 — Market studies power

- The ACCP should have the power to undertake competition studies[138] of markets in Australia and make recommendations to relevant governments on changes to regulation, or to the competition authority (ACCC) for investigation of potential breaches of the competition law.

Recommendation 50 — Access and Pricing Regulator There should be a single national Access and Pricing Regulator[139] with the following functions:

- the telecommunications access and pricing functions of the ACCC;
- price regulation in the water sector;
- the powers given to the ACCC under the National Access Regime;
- the functions undertaken by the Australian Energy Regulator under the National Electricity Law, the National Gas Law and the National Energy Retail Law;
- the powers given to the NCC under the National Access Regime; and
- the powers given to the NCC under the National Gas Law.

The Access and Pricing Regulator should be constituted as a five-member board. The board should comprise two Australian Government-appointed members, two state and territory-nominated members and an Australian Government-appointed Chair. Two members (one Australian Government appointee and one state and territory appointee) should be appointed on a part-time basis.

Decisions of the Access and Pricing Regulator should be subject to review by the Australian Competition Tribunal.

138. The Government supported this recommendation but decided that the ACCC should continue to exercise this power – no change to the current regime.
139. The Government “remains open” to this recommendation but at this stage it does not appear that this recommendation will be implemented.

Intergovernmental organisations

Of the three regional intergovernmental organisations, ATP, APEC and ASEAN, ATP does not appear to have an active role in promoting competition law.[140]

ASEAN appears to have had the greatest impact on competition law and practice in Asia to date and has been active in promoting the introduction of competition law among member states. The ASEAN Regional Guidelines on Competition Policy[141] were published in 2010. These are a non-binding set of reference rules. Member States have committed to introducing national competition policy and law to cater to the substantial economic opportunities and growth in the region, expected following the ASEAN free trade agreements. ASEAN Member States committed to introduce competition laws by 2015. This resulted in Brunei Darussalam and the Philippines, introducing for the first time a comprehensive competition law. Cambodia still lacks competition laws,[142] however, while Thailand and Laos have enacted a competition law, this does not appear to be effectively enforced, as seen above.

APEC's work in this area is carried out through the Competition Policy and Law Group (CPLG). The CPLG promotes understanding of regional competition laws and policies, examines their impacts on trade and investment flows, and identifies areas for technical cooperation and capacity building among member economies. The CPLG, formerly known as Competition Policy and Deregulation Group,[143] was established in 1996.[144] In 1999, APEC Ministers endorsed the APEC Principles to Enhance Competition and Regulatory Reform and approved a 'road map' that established the basis for subsequent work on strengthening markets in the region.

140. Although competition issues are one of the areas under review by the APT Policy and Regulatory Forum: see http://www.aptsec.org/APTPRF
141. http://asean.org/?static_post=asean-regional-guidelines-on-competition-policy-3
142. OECD, quoted, page 156
143. In 2008, members agreed to change the name of the group to the Competition Policy and Law Group to reflect the fact the regulatory aspects of competition are now being discussed within the framework of the Economic Committee (EC).
144. when the Osaka Action Agenda (OAA) work programmes on competition policy and deregulation were combined.

The Need for Coordination and Cooperation

Cooperation is important:

- Between agencies at the **national level** (i.e., between the national competition authority and the regulator)
- Between agencies at the **international level** (i.e., between supra-national groupings of regulators and competition authorities, and between the groups that, in each intergovernmental organisation, deal with regulation and competition law)
- Between regulators at the **international level**
- Between competition authorities at the **international level**

At the national level — cooperation between agencies

When there are two different agencies, there is a need for cooperation in each country between the telecommunications regulator and the competition authority. As seen in Figure 18, a different model involves setting up one agency with powers to enforce both competition law and regulation. This, the 'integrated model', applies in New Zealand.

Two agencies, three models in competition policy

Three possible models can be adopted when there are two agencies with competition policy enforcement powers, depending on whether the regulator has the powers to apply competition law to the sector it regulates. These are exemplified in Figure 18, reproduced again below for ease of reference.

Figure 18: Existing models in competition policy — Asia

	Two agencies: Competition authority and separate sectoral regulator	**Two agencies:** Regulator with concurrent powers in competition law	**Two agencies:** Regulator with exclusive jurisdiction to apply to telcos competition law	**One agency:** Only the regulator, only regulation	**One agency:** The Integrated Model
EXAMPLES	Most countries surveyed	Hong Kong	Malaysia, Singapore, Myanmar? Pakistan?	Cambodia	New Zealand
POSITIVES	Ensures that competition law is applied equally to all sectors of the economy	Ensures that competition law should be applied with sector knowledge, but competition authority retains ability to consider issues too	Ensures that competition law should be applied with sector knowledge. No safeguard of competition authority's involvement	Convenience. Country complies with WTO Reference Paper	Properly consistent application of competition law and sectoral regulation across all sectors of the economy. Synergies
NEGATIVES	Need for the agencies to understand their roles and to cooperate	Evidence suggests that regulators tend to apply regulation more than competition law. The competition authority defers to regulator	Risk of over-reliance on regulation of the sector. Risk that regulator applies regulatory categories when applying competition law	Especially with convergence in the digital economy, only telcos are subject to scrutiny. Non-level playing field	If the agency is not properly resourced, risk of backlogs. Need for coordination across the different parts of the agency

Source: GSMA

In the first model, the regulator does not have competition law powers. Competition law is applied by the competition authority in all sectors of the economy. At first sight, this model suffers from the disadvantage that the competition authority will not have the same in-depth knowledge as the sectoral regulator. This disadvantage can be overcome by close cooperation between the agencies: when the sector under investigation by the competition authority is the specific sector regulated by an independent regulator, the competition authority needs to take into account the views of the regulator. The advantage of this model is that, when the agencies cooperate properly, competition law is applied equally to all sectors of the economy and the competition authority acquires the necessary know-how. The intense focus on subjecting one sector, telecoms, to enhanced scrutiny, to the exclusion of other sectors of the economy, may lead to foregoing the very real benefits of competition policy enforcement for the economy as a whole, that were described above.

The second model is an intermediate model. The regulator can apply competition law to the sector, but the competition authority retains the powers to apply the rules to the sector also. This is known as the 'concurrency model', adopted in Mexico and in some European countries (Ireland, Greece, Iceland and the UK). In Asia, this is the model adopted in **Hong Kong**. This model has a theoretical appeal: the regulator can act under competition law but if it does not, then the competition authority retains the powers to do so. In practice, in the countries that have adopted the concurrency model, the competition authority rarely interferes with the powers of the sectoral regulator. There is evidence that, given the choice, a regulator with competition law powers does not use them often, preferring the tried and tested regulatory route.[145] In all reviews carried out in the UK, concerns were expressed about the small number of cases brought by the sectoral regulators using their competition law powers and the apparent preference of the sectoral regulators to rely instead on their sector-specific (regulatory) powers. There is also the risk that the regulator and the competition authority would reach different views about the same behaviour, perhaps allowing it in the wider economy and restraining it in the telecoms sector. And finally, there is still a need for an MoU or other means to agree between the agencies which has jurisdiction, in cases where a complaint is received that a telecoms operator has entered into an anticompetitive agreement with a company not subject to the jurisdiction of the regulator, for example.

The third model posits the *exclusive application by the regulator of competition policy (law and regulation) in the sector.* The reason to adopt this model is that the telecoms sector is complex. The regulator has a head start over a competition authority when it comes to understanding market dynamics. **Singapore** has adopted this system and arguably in Singapore the agencies have found a way to make this work. In Singapore, however, the competition authority and the regulator have issued joint guidelines for proper cooperation, and there is an established history of application of the competition rules upon which the regulator can draw. **Malaysia** has adopted this system and the issues described in Figure 28 illustrate the potential drawbacks.

145. In the UK, the country in which the regulators have been granted powers to apply competition law to their sectors for the longest time, the operation of this system has been reviewed on several occasions, including: (i) a joint report by the then Department of Trade and Industry and HM Treasury in 2006 (*Concurrent competition powers in sectoral regulation*, a report by the Department of Trade and Industry and HM Treasury (TSO, 2006)); (ii) a report by the House of Lords Select Committee on Regulators in 2007 (House of Lords Select Committee on Regulators, UK Economic Regulators, HL 189-I (TSO, 2007); (iii) a report by the National Audit Office in 2010 (National Audit Office, *Review of the UK's competition landscape* (TSO, 2010)); and (iv) BIS, *A competition regime for growth: a consultation on options for reform* (TSO, 2011), the precursor to some limited reform intended to give to the competition authority more powers to intervene if the sectoral regulators do not apply their competition powers properly.

Figure 28: Malaysia: exclusive sectoral application of competition rules

The approach in **Malaysia** is similar to the Singapore model. The telecoms sector is excluded from application of competition law by the competition authority, the Malaysia Competition Commission (MyCC). Instead, the regulator is empowered to apply competition law to the telecommunications and media sector, exclusively, under the terms of the Communications and Multimedia Act 1998 (CMA). It is interesting to note that although the substantive competition law provisions of the CMA address similar issues and advocate a similar approach (especially on the need for a market definition and a market assessment) they differ from the provision under the Competition Act, which was enacted a little over a decade later, and is inspired by European competition law. The CMA and the guidelines[146] issued by the sector regulator are more similar to the Australian competition law. This highlights the potential difficulties when a sector is subject to competition rules that are not entirely aligned with the competition rules that apply to the rest of the economy.

In an effort to coordinate the activities of the regulators and the competition authority, the latter, MyCC spearheaded the creation of the so-called Special Committee on Competition in 2011. This was created in order to ensure consistency in the application of the law. The Special Committee on Competition comprises representatives from the sector regulators, namely the Malaysia Communications and Multimedia Commission (MCMC), the Land Public Transport Commission (SPAD), the Central Bank of Malaysia (BNM), the Energy Commission (EC), the National Water Services Commission (SPAN) and the Securities Commission (SC). The Committee is chaired by the MyCC.[147]

There has been news that the CMA is being amended, and it may be an opportune time for the communications regulator to bring the substantive competition laws under the CMA in line with those under the Competition Act. Another sector regulator, the Aviation Commission established in 2015 under the Malaysian Aviation Commission Act 2015, also has competition policy powers, and the substantive law is modelled on the Competition Act, with the added provisions of merger control through a voluntary system; this is presently the only statutory merger control regime in Malaysia. Interestingly, the existing Guideline on Substantial Lessening of Competition issued by the MCMC[148] expressly state that the regulator considers that mergers involving telecommunications licensees must be investigated as "conduct which has the purpose of substantially lessening competition in a communications market" (under s.133 of the CMA). This is another instance showing how telecoms operators are under enhanced scrutiny, as compares to the players in the digital economy.

146. See in particular the Guideline on Substantial Lessening of Competition (http://www.skmm.gov.my/Resources/Guidelines/Guidelines/Guideline-on-Substantial-Lessening-of-Competition.aspx) and the Guidelines on Dominant Position in a Communications Market (http://www.skmm.gov.my/Resources/Guidelines/Guidelines/Guideline-on-Dominant-Position-in-a-Communications.aspx)
147. http://www.mycc.gov.my/sites/default/files/media-releases/News%20Release%20-%20Special%20Committee%20on%20Competition%20November%202015%20(english).pdf
148. Quoted, paragraphs 4.40-4.45

Emerging societies should consider their options carefully when reconsidering their existing frameworks. As seen above, it appears that a reconsideration is under way in **Pakistan**, under the terms of the New Telecommunications Policy. A system similar to the Malaysia/Singapore system may be the system preferred in **Myanmar**, when the new competition law comes into force in February 2017. There may be reasons to go down this route but, as always, policymakers should be clear that this is the best route for their country and about the interplay between agencies.

Cooperation is needed

Whatever the model chosen, close cooperation between the regulator and the (separate) competition authority is crucial to ensure that the competition authority has access to relevant sector specific information and can apply the competition rules consistently.

This issue is recognised in Asia. In some countries, there is a statutory system for determination of the jurisdiction between the regulator and the competition authority, as seen below.

- In **Hong Kong**, where the competition authority and the regulator have concurrent jurisdiction to apply the competition rules, they have an agreement backed by a Memorandum of Understanding.[149] Specifically for merger control (which applies to the telecoms sector only), they have also issued joint guidelines to the market to explain how they will apply their powers.
- The Telecoms Regulatory Authority of **India** is tasked with overseeing the telecommunications sector in India. However, the jurisdiction of the Competition Commission of India to proceed with an investigation is independent of other specialist regulatory agencies. To facilitate dialogue between the competition authority and the sectoral regulators, the legislative framework provides for a reference mechanism. In a proceeding before a sectoral regulator, where there is a risk of a decision that may run contrary to competition law, the regulator may refer the issue to the competition authority. Conversely, the competition authority may also make references to the relevant regulator. However, in either case, such references are not mandatory.[150]
- In **Singapore** the Minister of Trade and Industry may make regulations for the purpose of coordinating the exercise of powers by the Competition Commission of Singapore and the sectoral regulators. Such regulations may prescribe the circumstances where the competition authority or sectoral regulators should solely exercise their powers and where these powers may be concurrently or conjunctively exercised. The circumstances in which the latter will occur are limited.[151] As seen above, the sectoral regulators have mostly exclusive power to apply competition law to the sector that they regulate. In Singapore, the competition authority has issued guidelines explaining that when a competition investigation relates to cross-sector activities, they will coordinate with the relevant sectoral regulator and the agency best placed will take the lead.
- In **Indonesia**, the regulator (BRTI) and the competition authority (the KPPU) have a process of coordination through KPPU's Policy Harmonisation Mechanism. The KPPU identifies industrial policies it believes would affect competition and then initiates discussions as required.[152]

149. https://www.compcomm.hk/en/about/inter_agency/memorandum.html
150. See Clifford Chance, *A Guide to Antitrust and Competition Law in Asia Pacific*, January 2014, https://www.cliffordchance.com/briefings/2014/02/a_guide_to_antitrustandcompetitionlawinasi.html
151. Clause 5 of the Third Schedule of the CA and Clause 1 of the Fourth Schedule of the CA
152. Maher M. Dabbah, quoted, page 382. "Working together in this way, the hope is that KPPU and BRTI will be able to internalise a competition culture and competition values in the telecommunications sector while not detracting from the special considerations needed to effectively manage the telecommunications sector."

Even when there is a statutory recognition that issues may arise, therefore, the rules may not be mandatory. In all cases where there are no rules, or the rules are not very specific or not mandatory, the agencies themselves should consider signing informal MoUs to specify in advance how each agency will deal with the issues in cases of overlap. In Asia, it appears that MoUs are entered into at the supra-national level, more than at the national level.

At the international level — cooperation between agencies

If coordination between the agencies tasked with application of the competition rules and those tasked with application of sectoral regulation is desirable at the national level, this should also be desirable at the supra-national level, within the various regional organisations that have a remit for the digital ecosystem. However, often these organisations tend to operate in silos, such that the creation within APEC of an Ad-Hoc Steering Group on the Internet Economy that includes different branches of APEC itself is a rare occurrence. The silo approach extends to the way competition law and regulatory efforts are viewed even within the same regional organisations.

Indeed, cooperation is easier among regulators that meet at a supra-national level, and among competition authorities equally organised in supra-national groups.

Cooperation among competition authorities at the international level

As of 2015,[153] there has been growth in cooperation among competition authorities. The Australian competition authority, ACCC, has signed formal cooperation agreements with all three of China's competition agencies. These agreements allow for increased engagement between the two countries on matters of anti-competitive conduct, international cartel investigations and price supervision, subject to confidentiality and privacy restrictions under the laws of each of country. The ACCC has also signed an MOU with the Philippines Department of Justice that aims to contribute to the effective enforcement of the competition laws in each country.[154] Cooperation between the ACCC and the agencies of other nations in the region including Hong Kong, Malaysia and Singapore is also expected to increase.

In 2016, the Competition Commission of Singapore played host to the annual conference of the International Competition Network, bringing together competition authorities, practitioners and intellectuals from around the world.[155] At the time of writing, it has been announced that the Competition Commission of India will host the ICN annual conference in 2018. These announcements underscore the new pre-eminence in competition law that Asia has acquired.[156]

153. Bird & Bird, *Competition Law in Asia Pacific — highlights from 2015 and what's coming next in 2016*, http://www.twobirds.com/en/news/articles/2015/global/competition-law-in-asia-pacific-highlights-from-2015-and-what-s-coming-next-in-2016
154. Bird & Bird, quoted
155. Drew & Napier, quoted.
156. See: http://currentaffairs.gktoday.in/india-host-2018-international-competition-network-annual-conference-11201637047.html

Cooperation among national regulators at the international level

The other area of supra-national cooperation comprises the regional organisations that group national telecommunications regulators. In Asia, the main formal regional organisation of regulators is the **South Asian Telecommunications Regulator's Council (SATRC).** This was formed in 1997 by an initiative of APT and the ITU Regulatory Forum for South Asia. At present, SATRC includes the regulators of nine South Asian countries, namely: **Afghanistan, Bangladesh, Bhutan, India, Islamic Republic of Iran, Maldives, Nepal, Pakistan and Sri Lanka**. SATRC is responsible for discussion and coordination of issues relating to regulations in telecommunications and ICT which are of common interest to the telecommunications regulators in South Asian countries. These issues included radio frequency coordination, standards, regulatory trends and issues, strategies for telecommunications development and telecommunication-related international affairs. The council also identifies and promotes areas of potential cooperation in telecommunications among South Asian countries, and facilitates the exchange of information in these areas through activities such as seminars, training and workshop. SATRC activities are conducted by involvement of the highest level representations by the regulatory bodies of the South Asian countries. SATRC meetings are held annually.[157]

Merger control in the mobile sector

There are good reasons why merger control should be applied by the competition authority. If the regulator has the task of applying (competition law) tools to mergers, there is a real risk of diverging outcomes:

> *"the culture and analytical approach required to regulate an industry differ from those typically characteristic of a competition law enforcement agency. There is also a risk that an industry regulator's views about the structure of a particular market could influence a merger decision."* Australian Harper Report.[158]

In the case of mergers in the mobile sectors, concentrations are often motivated (among others) by a wish on the part of the merging companies to acquire the spectrum held by the acquisition target. Spectrum assignment is however the prerogative of regulators and governments, so that:

- on the one hand, the competition authority should consider the effects of the merger on the market as defined, to determine whether after the merger there will be a "substantial lessening of competition", as described in the Competition Policy Handbook.[159] The competition authority should consider, as part of this review, whether post-merger there could be barriers to entry: in conducting this analysis, the competition authority should consider all potential barriers, including spectrum scarcity; and

157. http://www.aptsec.org/APTSATRC -
158. Harper Report, http://competitionpolicyreview.gov.au/final-report/ , referred to in more detail in the Asia Chapter
159. Quoted. See in particular Assessing Market Power in the Digital Age, Key Concept 3, Mergers.

- on the other hand, regulators and governments are often nervous about spectrum assignment. They have the technical know-how to assess the consequences of a merger on spectrum availability, perhaps better than the competition authority.

Therefore, nowhere is the need for coordination greater than in merger control cases in the mobile sector. Cooperation between the competition authority and the regulator should lead to a decision that would take into account all aspects capable of affecting the market. The risk otherwise is that the competition authority and the regulator/government conduct parallel investigations, leading to the possibility of divergent decisions, the involvement of the courts and suboptimal results.

In Asia, in some countries there is no merger control at present at all. This is the case in **Thailand**, where there are provisions for merger control in the competition law, but crucial enabling legislation has not been enacted yet.[160] In **China,**[161] responsibility for merger control resides with the Ministry rather than an independent competition authority (or regulator).

Some countries have adopted a system that imposes extra scrutiny on the telecommunications sector, as compared to other sectors of the economy, leading to issues for a level playing field, particularly in the digital economy. For example:

- A sectoral approach applies to **Hong Kong**, at least for the time being. The Competition Ordinance modernises aspects of the merger control regime in anticipation of a possible extension of the regime to all sectors of the Hong Kong economy in the future. For the time being, the competition authority and the regulator have concurrent powers to investigate mergers in the telecommunications sector and have together issued guidelines setting out how they intend to interpret and give effect to merger control.[162] The merger control regime in Hong Kong is *voluntary*,[163] meaning that there are no penalties for non-notification, but that the relevant authority can investigate mergers after they have been entered into. The risk of having to "undo" a merger following an investigation ("unscrambling the eggs") is often sufficient to make notification the preferred option when the parties to a merger consider that there may be issues. The adoption of a voluntary system of merger control can be efficient, allowing the competition authority to prioritise the investigation of mergers that may lead to a substantive lessening of competition. The vast majority of mergers in the economy do not give rise to competition concerns but, under a system of *mandatory* merger control, all mergers that meet the requirements would need to be investigated.

- In **Japan**, foreign shareholding in Japanese companies is limited by specific sectoral legislation: NTT, the holding company of the national telecoms carrier, must be less than 33.3 per cent foreign-owned. Also, foreign shareholdings must be less than 20 per cent for terrestrial and radio broadcasters (and less than 33.3 per cent for domestic airlines).[164] This means that in these sectors, the possibility to merge is limited by application of foreign shareholding limitations.

160. https://gettingthedealthrough.com/area/20/jurisdiction/60/merger-control-thailand/
161. In **China**, the Ministry of Commerce (MOFCOM) has sole jurisdiction among China's three competition enforcement agencies for merger control enforcement. MOFOCOM has adopted new guidelines in 2014. Special rules apply to acquisitions by foreign enterprises of Chinese companies. https://gettingthedealthrough.com/area/20/jurisdiction/27/merger-control-china/
162. https://www.compcomm.hk/en/legislation_guidance/guidance/merger_rule/merger_rule.html
163. Australia also has a voluntary system of merger control: https://gettingthedealthrough.com/area/20/jurisdiction/5/merger-control-australia/
164. https://gettingthedealthrough.com/area/20/jurisdiction/36/merger-control-japan/

- In **Malaysia** competition law does not include the control of concentrations, although a special regime that includes merger control applies to the aviation industry since 2015.[165] As seen above, an informal system of merger control applies *de facto* to mergers involving telecoms licensees.
- In **Singapore,** where the regulator is also responsible for merger control in the telecommunications sector, merger control is voluntary, except in specific sectors. Specifically for telecoms, when an acquisition results in a party acquiring at least 12 per cent of the voting rights in a designated licensee, then the approval of the regulator must be obtained.[166]

Although in these countries the merger control regime that applies to the telecoms sector raises issues about whether the playing field is level and how the rules could be applied in a non-discriminatory way, the jurisdiction of the regulator and of the competition authority seem to be relatively clear. Not so in a number of countries in 'emerging' and 'transition' societies, where there is an urgent need to clarify the boundary of the respective jurisdictions. This is the case, for example, in **Bangladesh** and **Pakistan**.

The recent merger between Robi and Airtel in Bangladesh (Figure 29) provides an illustration of the difficulties that arise when the jurisdiction of the regulator and of the competition authority are not properly set out in the legislative framework.

Figure 29: Bangladesh: Robi/Airtel Merger

Bangladesh: Robi/Airtel Merger
Years: 2015-2016
Authorities: Bangladesh Telecommunications Regulatory Commission ("BTRC"), High Court, Prime Minister's Office ("PMO"), Ministry of Post and Telecommunications ("MoPT")

Legislative and Regulatory Framework:
Telecommunications Act 2001 (Act No. XVIII of 2001). Under paragraph 55, setting out, in part, that spectrum rights shall not be transferable.

Competition Act 2012. Establishing a national competition commission.

Chronology:
- September 2015. Robi and Airtel announce their intention to merge and send a letter to the BTRC seeking permission.
- January 2016. Robi and Airtel sign a merger agreement.
- March 2016. The BTRC issues its recommendation to the government and to the High Court that the merger be allowed based on specified conditions.
- August 2016. The Prime Minister, based on an inter-ministerial committee's advice, grants permission for the merger, conditioned on the new entity's payment of merger and spectrum fees and other conditions, including to ensure that there is a voluntary retirement

165. Malaysia has adopted a sectoral approach to competition law, granting the regulator exclusive powers to apply competition law to the telecoms sector (and indeed in other sectors too, such as the energy sector). http://globalcompetitionreview.com/reviews/78/sections/300/chapters/3172/malaysia-overview/.
166. https://www.ida.gov.sg/-/media/Files/PCDG/Practice%20Guidelines/TCC/2012TCC_wef_2July2014.pdf, chapter 10

Figure 29: Bangladesh: Robi/Airtel Merger

scheme for employees not willing to work for the merged company.

- End of August 2016. The High Court gives final clearance for the merger, ending the approval process and allowing Robi and Airtel to proceed.

Background:

In September 2015, Robi Axiata Limited ("Robi") and Bharti Airtel Limited ("Airtel") announced their engagement in merger talks and applied for merger consent from the BTRC. The merger of the third- and fourth-largest operators would mark the first step towards consolidation in Bangladesh's eight-operator mobile market, creating the second-largest operator by number of subscribers.

The approval process appeared unclear, particularly given the Telecommunications Act's prohibition on transferring spectrum and the fact that, despite the 2012 Competition Act's establishment of a Competition Commission, no chairman had been selected and the Commission was not yet operational. While the companies acknowledged that they would conduct their merger process according to the requirements of the general Companies Act 1994, there was no established process for the evaluation of a proposed merger or for the processing of a merger proposal from two mobile operators.

With no precedent for such a merger, the BTRC decided in December to seek consultation from the other operators before holding a public hearing to further assess its position and commissioned to external consultants, university professors, to conduct an analysis of the impact of the proposed merger.[167] Following Robi's and Airtel's formally signing their merger agreement in January, the High Court ordered the regulator to submit its recommendation to the Court in the spring.

In March, the BTRC issued its recommendation and report to the High Court and to the MoPT that the merger be approved with conditions attached, including that the merged entity pay substantial merger fees and spectrum fees related to Airtel's spectrum licences and that Airtel not be allowed to withdraw before the expiration of its spectrum licences in 2028.[168]

At an inter-ministerial meeting in July chaired by the Finance Minister, the government finalised the fee terms to be attached to the proposal, and at the end of July, the government submitted to the Prime Minister, who is also the Minister for Post and Telecommunications, the final summary of the merger proposal, inclusive of conditions, for her consent, which she gave at the beginning of August.[169]

On August 31, the High Court issued its formal approval of the proposal, ordering the new entity to pay approximately $12.8 million in merger fees and approximately $65 million in spectrum fees to the BTRC.[170]

167. Ahmed Shawki, "Robi-Airtel Merger: BTRC to seek opinion form other telcos," NEWAGE, 30 Dec. 2015, *available at* http://newagebd.net/188435/robi-airtel-merger-btrc-to-seek-opinion-from-other-telcos/.
168. "BTRC offers gesture to Robi-Airtel merger," Bangladesh News 24, 19 Mar. 2016, *available at* http://www.bdnews24us.com/article/1194/index.html.
169. Ishtiaq Husain, "PMO Clears Robi-Airtel merger proposal," Dhaka Tribune, 2 Aug. 2016, *available at* http://www.dhakatribune.com/business/2016/08/02/pmo-clears-robi-airtel-merger-proposal/.
170. "Bangladeshi High Court approves Robi-Airtel merger," Telegeography, 2 Sept. 2016, *available at* https://www.telegeography.com/products/commsupdate/articles/2016/09/02/bangladeshi-high-court-approves-robi-airtel-merger/.

The recent merger between Mobilink and Warid shows that similar concerns exist in Pakistan (Figure 30).

Figure 30: Pakistan: Mobilink/Warid Merger

Pakistan: Mobilink/Warid Merger
Year: 2015-16
Authority: Ministry of Information Technology and Telecommunications (MoIT), Pakistan Telecommunications Authority (PTA), Competition Commission of Pakistan (CCP).

Legislative Framework:

- Competition Act 2010. Establishing the CCP and setting the framework for the merger review process.
- Competition (Merger Control) Regulations 2007. Setting procedures and thresholds for CCP's merger review.
- Telecommunications (Re-organisation) Act, Section 57. Requiring the MoIT/ Federal Government to make rules to prevent, prohibit and remedy the effects of anti-competitive conduct by telecoms licensees. Sections 4 and 6 of the Act empower the PTA to regulate competition in the telecommunications sector to ensure that fair competition exists and is maintained.
- Pakistan Telecommunications Rules 2000. Rule 11 requires a licensee to give prior notice of a proposed change in substantial ownership or control of a licensee. The PTA may impose additional conditions in case it holds the opinion that this change will adversely affect the ability of the licensee to provide licensed telecommunications services.
- Pakistan Telecommunications Authority (Functions & Powers) Regulations 2006. Regulation 22 requires a licensee to give prior written notice of any proposed merger and the Authority shall give its decision on the desirability or otherwise of such proposed merger.
- Telecommunications Policy 2015. Drafted by the MoIT with input on regulatory and policy changes from the PTA. Section 8.17 declaring that spectrum management issues should not stand in the way of merger approval.

Chronology:

- December 2013 — Pakistan Telecommunications Company Limited (PTCL) launches bid for Warid.
- March 2014 — PTCL/Warid merger deal collapses when operators are unable to agree on price.
- November 2015 — Mobilink (VimpelCom) and Warid (Abu Dhabi Group) announce merger.
- March 2016 — CCP approves the merger, subject to conditions and certain remedial actions.
- May 2016 — PTA approves the merger, subject to certain conditions.

Figure 30: Pakistan: Mobilink/Warid Merger

Background:

The Pakistani mobile market has a penetration rate of less than 70 percent and a mobile broadband penetration rate of about 15 percent.[171] As operators continue to expand, they are looking for additional LTE spectrum resources and economies of scale. Accordingly, at least three of the five operators have looked to acquire the smallest of the five mobile operators (Warid). Warid has a market share of less than 10 percent of connections.

In December 2013, Telecommunications PTCL launched an initial bid for Warid, but talks collapsed by March 2014 due to inability to agree on the price. Zong and Mobilink each considered making a bid at the time for Warid but did not proceed.[172]

In November 2015, VimpelCom and the Abu Dhabi Group, the parent companies of Mobilink and Warid, respectively, announced the first mobile telecommunications merger in the Pakistani market. The merger of Mobilink, Pakistan's largest mobile wireless operator, and Warid, the fifth largest, would give to the new entity a combined customer base of approximately 50 million, according to company sources.

The CCP reviewed the proposed merger and granted its approval in March 2016. Following a phase 2 investigation, the CCP granted approval, subject to several remedial actions, mostly intended to address spectrum concentration in LTE bands. To mitigate any potential anti-competitive harm, the CCP not only imposed monitoring requirements and operational restrictions on the merged entity but also made recommendations to the PTA to develop infrastructure and spectrum sharing guidelines, noting that the Telecommunications Policy 2015 already called for such a framework. The CCP's review of the deal extended to a broader market analysis, leading it to make further recommendations the PTA, such as a re-evaluation of its MVNO framework to impose wholesale access obligations not only on Mobilink/Warid, but also on all operators.[173]

The PTA's approval followed two months later, in May 2016. The PTA took into account the CCP's recommendations related to telecommunications regulation.[174] The PTA's substantive analysis largely mirrored that of the CCP, first focusing on changes in level of competition, based on change to the HHI, followed by a review of "necessary safeguards," including maintenance of BTS sites, quality of service standards and interconnection mandates.[175] The PTA also conducted public consultation with the general public and government agencies.

Analysis:

- Jurisdiction: While the CCP and the PTA appear to abide by an understanding of their respective roles in the process of merger review, there are no formal guidelines in place regarding each agency's role. In July 2014, it was announced that the CCP and the PTA

171. GSMA Intelligence, Pakistan — Market Data (subscription service).
172. Tim Ferguson, "Pakistan Telecom-Warid merger talks falter," Mobile World Live, 6 Mar. 2014, http://www.mobileworldlive.com/featured-content/home-banner/pakistan-telecom-warid-merger-talks-falter/.
173. Aamir Attaa, "A Detailed Look at CCP's Approval of Mobilink-Warid Merger," ProPakistani, 25 Mar. 2016, http://propakistani.pk/2016/03/25/a-detailed-look-at-ccps-approval-of-warid-mobilink-merger/.
174. PTA Approval, § 3.
175. *Id.* at § 7.1.2.

Figure 30: Pakistan: Mobilink/Warid Merger

would sign a Memorandum of Understanding (MoU) regarding the role of each agency in the review of competition matters in the telecoms sector.[176] However, no MoU appears to have been signed, and neither agency makes reference to such an MoU in its opinion. This leaves a lack of clarity in the review process. Furthermore, the dual jurisdiction of the telecom-specific PTA and the general competition authority CCP adds an extra layer of potential conditions and costs for merging parties. In this merger case, each agency reviewed both market concentration issues as well as telecommunications regulatory issues. This approach raises the risk of different agencies reaching conflicting outcomes.

In addition, under the Telecommunications Policy 2015, the MoIT is required to draft new Competition Rules for the telecommunications sector,[177] including a review of market definitions and significant market power. However, the Telecommunications Policy 2015 makes no reference to the jurisdiction of the CCP, and it remains unclear how such competition rules will affect, if at all, the standards of merger review for the PTA and the MoIT.

Areas for consideration:

- The CCP and the PTA should sign an MoU to clarify for operators and the market the respective roles for each agency in the merger control process. Policymakers could consider a consolidated merger review process in which the PTA would advise on telecommunications sector issues.
- The MoIT, in drafting the new Competition Rules, should consult with the CCP to ensure that licensees seeking to merge do not face multiple different definitions of the market and competition thresholds.

The MoIT should also take a holistic view of the digital market, considering all sources of competition in the communications market, including those attributable to market players not directly licensed or authorised by the PTA or other government agency.

176. "PTA and CCP will prepare MoU about roll in Telecom," Teleco Alert: Pakistan Information Communication Technology News Network, 24 July 2014, http://www.telecoalert.com/pta-and-ccp-will-prepare-mou-about-roll-in-telecom/.
177. The Telecommunications Policy 2015 gives the ministry a deadline of six months from its December 2015 issuance to issue the new competition rules. However, as of November 2016, these rules have not yet been issued.

Spectrum Issues in Asia Pacific

Four issues will be considered.

First, spectrum harmonisation is an obvious area where supra-national organisations can make a difference. In Asia, the APT Wireless Group (AWG)[178] was instrumental in the global acceptance of its plan to harmonise the 700 MHz band for mobile broadband, after the digital switchover of television broadcasting.

The AWG has the important goal of studying spectrum sharing methodologies and spectrum harmonisation and to provide advice on national frequency band planning. As countries started digitising television services, making the recovery of a portion of the analogue TV spectrum bandwidth possible (the so-called digital dividend), the 700 MHz band was considered the ideal band for future low-band LTE requirements. AWG developed an APT Report on "Implementation Issues Associated With Use of the Band 698-806 Mhz By Mobile Services" in 2011. In 2013, the APT band plan to harmonise the 700 MHz band for mobile broadband obtained global acceptance.[179] This has unfortunately not resulted in universal harmonisation in Asia. **Thailand** and the **Philippines** are yet to commit to the assignment of the 700 MHz band for mobile broadband services. Both countries need to move quickly to harmonise use of the 700 MHz to keep pace with the rest of the region. Countries that have committed to harmonisation need to meet their digital switchover targets to realise the potential of the band to boost internet connectivity.[180]

Second, as considered generally in appendix 1, it is important that spectrum assignment takes place in a way that incentivises efficient use of the spectrum, through competitive selection methods. When assigning spectrum through the use of auction mechanisms, these should be designed to maximise auction efficiency. When the criteria are not properly thought through, or the reserve price is too high, the aims of the auction may not be met (such as in Australia, Figure 31) or there could be confusion in the market place (e.g., in Thailand, see Figure 32).

178. a specialist work program Group within APT, dealing with various aspects of spectrum and emerging wireless systems
179. Stuart Davis, APT 700 MHz Band Plan, *ITU SEMINAR ON SPECTRUM MANAGEMENT AND TERRESTRIAL TV BROADCAST IN PACIFIC*, 10th July 2015, Nadi, Fiji. Available by internet search
180. GSMA The Mobile Economy Asia Pacific, page 60

Figure 31: Australia's auction of digital dividend concludes with 1/3 of spectrum unsold

Australia

- In May 2013, Australia's auction of digital dividend spectrum concluded with one-third of the 700 MHz band unsold.
- The auction, which also included lots of 2.6 GHz spectrum, generated considerably less revenue than the government had predicted.
- It was reportedly the first occurrence of any digital dividend spectrum being left unsold.
- The Australian government has since been criticised for setting the reserve price unrealistically high at $1.43/MHz/ population.
- Of the country's three incumbent mobile operators, Telstra and Optus bought less of the 700 MHz spectrum than they were allowed to under the auction rules, and Vodafone Hutchison Australia chose not to bid at all.
- Vodafone Hutchison Australia made a proposal to buy 2x10 MHz of the unsold spectrum earlier in 2016. As a result the Federal Government decided to conduct a new auction for the remaining 700 MHz lots, most likely to be held in 2017. [181]

Figure 32: Thailand's auction leads to default on spectrum payments by new licensee

Thailand: Default on Spectrum Payment by New Mobile Licensee
Years: 2015-16

Authority: National Broadcasting and Telecommunications Commission ("NBTC")

Legislative and Regulatory Framework:

- Act on Organization to Assign Radio Frequency and to Regulate the Broadcasting and Telecommunications Services, B.E. 2553 (2010), §§ 41, 45. Empowering and obliging the NBTC to auction spectrum frequencies and to set adequate criteria for the qualifications of bidders.
- Notification of the NBTC, Criteria and Procedure for the Licensing of Spectrum for Telecommunications Service in the Frequency Band of 895-915 MHz/940-960 MHz (2015), §2. Establishing qualifications of auction applicants.

Chronology:

- December 2015. Jasmine won a 900 MHz spectrum license through auction, becoming the country's fourth mobile operator.
- February 2016. Reports indicated that Jasmine had begun seeking a foreign investor to help it pay cost of the licence and the capex necessary for the network buildout.

181. See: https://www.communications.gov.au/have-your-say/draft-ministerial-direction-unsold-700-mhz-spectrum

Figure 32: Thailand's auction leads to default on spectrum payments by new licensee

- March 2016. Jasmine forfeited its licence after missing the deadline to pay the initial instalment of the licence fee.
- May 2016. The NBTC sold the 900 MHz licence to market-leader AIS.
- June 2016. Jasmine paid a fine of approximately $23 million to the regulator for its failure to pay the licence fee.

Background:

During a December 2015 spectrum auction conducted by the NBTC, Jasmine International, Thailand's second-largest broadband provider, won a 4G spectrum licence in the 900 MHz band, positioning the company to become the country's fourth operator in the mobile market with an already high penetration rate, sparking fears of a price war. Industry analysts, however, expressed concerns over the pressure on the operator's financial position, considering the 10 MHz-block price tag of more than $2 billion and the need to build some 10,000 base stations to operate a mobile network.[182] Jasmine's international partners—rumoured to be SK Telecom, Temasek and Chunghwa Telecom—withdrew their support over the unexpectedly high cost of the spectrum block.[183]

These high prices were stoked by an extended period of uncertainty created by multiple delays in the auction of 900 MHz and 1800 MHz bands and expired concessions. Following a military coup in May 2014, the planned July 2014 auction of 900 MHz bands and the August 2014 auction of 1800 MHz bands were put on hold while the ruling Council assessed the NBTC's plans.

Operators' previous concessions in the 1800 MHz band expired in September 2013 and the concessions in the 900 MHz band expired in September 2015. Operators were allowed to continue their use of those frequencies until the auction was eventually held—a moving target of a deadline.[184] Eventually, Jasmine was awarded the licence in December 2015.

Facing a March 21 deadline to pay the first instalment of the licence fee, Jasmine began seeking a foreign partner to purchase up to a 30 percent stake in the company in order to help cover the costs.[185] However, Jasmine failed to make the payment of approximately $230 million by the deadline and thus forfeited its claim to the licence. Jasmine's CEO explained that, while the company had found a Chinese partner, delays in the Chinese regulatory approval process would mean that the deal could not be completed until mid-April. Jasmine reportedly asked for an extension from the NBTC or the ability to make a partial payment, but to no avail.[186]

182. "Thailand's True, Jasmine win 4G licences for record," Mobile World Live, 21 Dec. 2015, *available at* http://www.mobileworldlive.com/asia/asia-news/thailands-true-jasmine-win-4g-licences-for-record-4-2b/.
183. "Jasmine fails to make payment, forcing Thai 4G re-auction," Mobile World Live, 22 Mar. 2016, *available at* http://www.mobileworldlive.com/asia/asia-news/jasmine-fails-to-make-payment-forcing-4g-re-auction/.
184. Toby Youell, "Thai junta delays spectrum auctions for a year," PolicyTracker, 2 Sept. 2014, *available at* http://www.policytracker.com/headlines/thailands-junta-delay-900-mhz-and-1800-mhz-auction-for-one-year.
185. "Thai telecoms firm Jasmine faces tough quest for financing-analysts," Reuters, 3 Feb. 2016, *available at* http://www.reuters.com/article/thailand-telecoms-4g-idUSL3N1561GE.
186. "Jasmine CEO reveals reason for Thai 4G licence default," Mobile World Live, 23 Mar. 2016, *available at* http://www.mobileworldlive.com/asia/asia-news/jasmine-ceo-reveals-reason-for-4g-licence-default/.

Figure 32: Thailand's auction leads to default on spectrum payments by new licensee

Then, in May 2016, the NBTC re-auctioned the forfeited 900 MHz licence. The re-auction comprised stricter conditions than the original process, including a pre-determined fine of approximately $327 million if the winner defaults on its licence payment.[187] The NBTC required bidders to put up 5 percent of the new reserve price, set at the same level as Jasmine's original winning bid. The regulator also noted that Jasmine would remain liable for any shortfall should the re-auction process fail.[188]

Operator True collected the bidding documents but did not submit a bid in the auction.[189] True would have been barred from participating due to spectrum caps, but the government ruled that all operators, except for Jasmine, qualified to bid for the block.[190] AIS then offered simply to pay the amount of Jasmine's bid, without need for auction, but the government insisted, for the sake of the regulator's credibility, that the auction proceed.[191] AIS was the sole bidder and ultimately won the auction, paying the new reserve price.

In June, the NBTC issued a fine of approximately US$23 million to Jasmine for its failure to pay for the spectrum licence. The regulator determined the amount by considering costs incurred during the December 2015 auction, the cost to re-auction the spectrum and interest from the default date.[192]

Analysis:

- Jurisdiction
  - While the 2010 Act on Organization grants the authority over the spectrum auction process to the NBTC, the existing rules of the NBTC were not adequate to handle this unique situation of having only one applicant for the auction in a way that maximised the country's economic interests and industry competition. Going forward, careful considerations should be made on how to enhance the rules to provide regulators with more flexibility to deal with similar unexpected situations without having to rely on government intervention.
- Substance
  - The NBTC's Notification setting the rules for the 2015 spectrum auction required applicants to submit a consent letter disclosing confidential information, including "[i]nformation relating to business operations plan, network deployment plan, policy, information relating to financial status, marketing and cost, operating plan as well as cost of regulatory assessment."[193] Jasmine would have submitted this information with its application, along with information regarding its intended international

187. "Thailand's AIS shows interest in forfeited 900MHz spectrum," Mobile World Live, 5 Apr. 2016, *available at* http://www.mobileworldlive.com/asia/asia-news/thailands-ais-shows-interest-in-forfeited-900mhz-spectrum/.
188. "Thailand sets out 900 MHz re-auction terms," Telegeography, 30 Mar. 2016, *available at* https://www.telegeography.com/products/commsupdate/articles/2016/03/30/thailand-sets-out-900mhz-re-auction-terms/.
189. See "True Move drops out of 900 MHz re-auction, at http://www.bangkokpost.com/tech/local-news/976685/true-move-drops-out-of-900mhz-re-auction
190. "Thailand's True is big winner in walking away from 900 MHz re-auction," Mobile World Live, 18 May 2016, *available at* http://www.mobileworldlive.com/asia/asia-blogs/blog-thailands-ais-to-participate-in-uncontested-900mhz-re-auction/.
191. *Ibid.*
192. "NBTC fines Jas Mobile THB200m for failure to pay for 900MHz spectrum licence," Telegeography, 3 June 2016, *available at* https://www.telegeography.com/products/commsupdate/articles/2016/06/03/nbtc-fines-jas-mobile-thb200m-for-failure-to-pay-for-900mhz-spectrum-licence/.
193. Consent Letter of Applicant, Notification of the NBTC, Criteria and Procedure for the Licensing of Spectrum for Telecommunications Service in the Frequency Band of 895-915 MHz/940-960 MHz (2015).

Figure 32: Thailand's auction leads to default on spectrum payments by new licensee

partners. While the information submitted to the NBTC remains confidential, the failure of Jasmine to secure financing and therefore to pay the first instalment of the price of the licence indicates the likely existence of apparent flaws with the operator's application which were not picked up, notwithstanding the very high price.

Areas for consideration:

- The independence of the regulator is important, to nurture confidence in a predictable regime characterised by regulatory consistency and the regulator's credibility.
- It is important to ensure that applicants meet the requirements for financial health and capacity not only to pay for the price of the licence, but also to finance network build out and operation. In fact, bidders were only asked to submit a bank guarantee for 5% of the reserve price, and there was no way to ask for a higher one, as prices increased.
- A different packaging of spectrum (smaller blocks) could have led to more efficient outcome.
- Lack of spectrum roadmaps, the comparatively small amount of spectrum in Thailand, combined with legal uncertainties could have led to a "now or never" consideration from Jasmine.

Third, if a country is considering the introduction of a new entrant, it should do so only after a proper market assessment to determine whether there is a need to affect the market structure in such a fundamental way, as with reserving spectrum for new entrants. Failure to do so may result in overcrowded mobile markets. In Figure 33, the case of Indonesia, where seven mobile operators were licensed, resulting in four not being able to compete (and seeking to merge), is considered.

Figure 33: Indonesia ends up with seven operators then pushes for consolidation

Indonesia: Government Push for Consolidation
Year: 2015-16
Authority: Ministry of Communications and Informatics (MoCI), Competition Commission (KPPU).

Legislative Framework:

- Law on Telecommunications, 1999, No. 36, Article 10. Prohibiting monopolistic practices and unfair business competition, and referencing the Prohibition of Monopolistic Practices and Unsound Business Competition Law to establish standards for review.
- Prohibition of Monopolistic Practices and Unsound Business Competition Law, 1999, No. 5. Defining dominant position and setting merger notice periods. Also establishing the Business Competition Supervisory Commission.

Figure 33: Indonesia ends up with seven operators then pushes for consolidation

Chronology:

- September 2013 — XL Axiata announces merger with Axis
- November 2013 — MoCI approves the merger and allows the merged entity to keep Axis' 1800 MHz spectrum but not 2100 MHz.
- March 2014 — KPPU issues a pre-merger non-objection to the merger, finding no resulting monopoly or unfair competition, but requiring the merged entity to report market conditions, products and tariffs for three years to ensure its commitment to competitive tariffs.
- January 2016 — Minister Rudiantara of MoCI, appointed in Oct 2014, threatens to revoke the licences of the operators for continued non-compliance with their obligation to roll out, as per their licence conditions.

Background:

The Indonesian mobile market has experienced rapid growth in the past several years, with a market penetration rate increasing from just under 90 percent at the beginning of 2011 to nearly 135 percent at the beginning of 2016.[194] As of June 2016, the Indonesian MoCI had licensed seven operators. The top four operators account for a total of about 95 percent market share.[195]

The smaller operators attempted to scale up. Beginning with price wars in the late 2000s, operators have struggled with low ARPUs and significant operating losses.[196]

The MoCI has long recognised the need for consolidation in the market. Early in 2016, Minister Rudiantara of the MoCI aggressively renewed the public campaign to encourage mergers or exits among the operators. In January 2016, he threatened to revoke licenses if the holders do not move soon to build out their networks and encouraged smaller carriers without sufficient resources for network investments to merge with one another or with larger carriers.[197] By 2019, says Minister Rudiantara, Indonesia should have only a maximum of four operators.[198]

In order to merge, operators must gain multiple, separate governmental approvals and opinions, most importantly from the KPPU and the MoCI. While the KPPU's process focuses on whether a monopoly will result, its opinion is not tantamount to approval or disapproval. Rather, the KPPU issues a pre-merger opinion upon prior notification, with a finding of either an opinion of "no indication" of monopolistic practices or unfair competition, of "indication" or of "no indication" with remedies required. The opinion is not legally binding. However, all such mergers require the parties to notify the KPPU within 30 days of completion of the transaction, and the KPPU will then issue within 90 days an objection letter, a no objection letter or an objection with remedies letter. A negative would subject the merged entity to

194. GSMA Intelligence, Market Data — Indonesia (subscription service) (2016).
195. GSMA Intelligence, *supra* note 1.
196. "Consolidate to accumulate: A reduction in the number of players could help shore up ARPU
197. *E.g.*, Yudith Ho and Fathiya Dahrul, "Build Network or Lose License, Indonesia Telecoms Minister Says," Bloomberg Technology, 19 Jan. 2016, http://www.bloomberg.com/news/articles/2016-01-19/build-network-or-lose-license-indonesia-telecom-minister-says.
198. Ho and Dahrul, *supra* note 3.

Figure 33: Thailand's auction leads to default on spectrum payments by new licensee

sanctions contained in the Prohibition of Monopolistic Practices and Unsound Business Competition Law.

Independent of the KPPU process, the merger process in the telecommunications sector is subject to the approval of the MoCI regarding spectrum assignment and operational telecommunications licence adjustment.[199]

Earlier in 2013/14, XL Axiata completed its acquisition of smaller rival Axis. The KPPU gave its post-closing opinion that the merger should be approved without permanent conditions in spring 2014, noting that the merger would not risk creating a monopoly, considering its 21 percent projected market share compared to the much larger market shares of operators Telkomsel and Indosat and finding this tolerable delta in the HHI.[200] The MoCI approved the merger in November 2013 but as required by Indonesian law, XL Axiata had to return Axis' frequency allocations in the 2100 MHz bands.[201] MoCI however allowed the retention of Axis's 1800 frequency allocation.

Analysis:

- Jurisdiction: The dual jurisdiction of the industry-specific MoCI approval and the KPPU places not only an additional layer of risk that mergers be blocked but also an additional layer of potential conditions to the merger. While both the KPPU and the MoCI look to the standards set out in the 1999 Prohibition of Monopolistic Practices and Unsound Business Competition Law, their applications are not dependent on one another and differ in objective. The KPPU looks for potential market dominance. The MoCI measures additional, undefined market dynamics in addition to the potential for market dominance based on the perspective of licensing authorisations and spectrum holdings, often the most valuable element and motivator of a deal.

Areas for consideration:

- The licensing of many operators in Indonesia did not lead to increased competition. This is a cautionary tale for countries wishing to introduce new entrant licensees. Entry should only be considered when the need for entry is established, and only if the conditions for network roll out can be satisfied by multiple mobile operators.
- Indonesian policymakers should consider streamlining and clarifying the jurisdiction of the different authorities with power to approve or block mergers, in the interest of predictability.
- In addition, current provisions limiting the ability of operators to achieve greater scale efficiencies e.g. spectrum trading, active network sharing, should be reviewed.

199. *See* Dewie Pelitawati and Melanie Hadeli, *Indonesia*, in The Technology, Media and Telecommunications Review 197-98 (John P. Janka ed., 2d ed. 2010).
200. "XL Axiata secures approval on Axis merger," Mobile World Live, 12 Mar. 2014, http://www.mobileworldlive.com/featured-content/home-banner/xl-axiata-secures-axis-merger-approval/.
201. "XL Welcomes Approval from the Ministry of Communications and Informatics for M&A with AXIS," Press Release, Axiata, https://www.axiata.com/mroom/news-article/10/; "XL Axiata completes Axis acquisition," Telegeography, 21 Mar. 2014, https://www.telegeography.com/products/commsupdate/articles/2014/03/21/xl-axiata-completes-axis-acquisition/.

Fifth, as the Indonesian case demonstrates, there is an obvious interplay between licensing and merger control rules. If, on the one hand, too many operators are licensed, then wishing for them to merge, will only be possible if the merger rules are clear and if the merging parties can have transparency as to the spectrum that they will retain. In Indonesia, seven mobile operators found it difficult to compete, but, although the Government pushed for consolidation, the merger control rules are far from clear and supportive of consolidation.

Merger control is an area where regulators and governments wish to retain control on spectrum assignment, and the competition authorities are often required to approve mergers under merger control rules. As seen above, in some countries the regulator has jurisdiction to consider mergers in the telecoms sector, leading to a further potential distortion of the regulatory regime, where the telcos continue to be assessed under a separate framework.

Sub-Saharan Africa

Summary

To foster the development of the digital economy, the system of sector-specific regulation should be flexible; regulation should only be applied after a proper market assessment, and only where competition law is not sufficient to deal with the issues. Competition authorities and regulators should cooperate in-country and across countries, giving rise to the need for coordination and cooperation. Across Sub-Saharan Africa, competition law has been enacted in only 14 of the 50 countries surveyed, although there is a discernible trend towards adoption of competition laws both at the national level and at the level of supranational organisations. Africa is home to two ambitious experiments about supra-national enforcement of competition law, by COMESA and WAEMU. There is increasing recognition about the benefits of adopting competition policy and allocating resources to a competition authority, for the economy as a whole.

Competition law enforcement and competition policy, in Africa and around the world are "effective tools for transforming product input markets and boosting productivity, innovation, competitiveness and inclusive growth. They also help the poorest population groups access a wider variety of competitively priced goods. Furthermore, competition in public procurement delivers savings for the government and increases the efficiency of infrastructure and social services provision. Competition authorities play an important role as champions, advocates and enforcers of competition policy across economies."[202] In particular:

- "Reducing the prices of main food staples by even a modest 10 percent (far below the average overcharge imposed by cartels around the globe) by tackling anticompetitive behaviour in these sectors or improving regulations that shield these markets from competition could lift 270,000 people in Kenya, 200,000 people in South Africa, and 20,000 people in Zambia above the poverty line."[203]
- Fundamental market reforms to increase competition in key input services would also boost economic growth: reforming professional services markets would deliver an additional 0.16–0.43 percent" of annual growth in gross domestic product.[204]

202. World Bank Report, *Breaking Down Barriers*, *Unlocking Africa's Potential through Vigorous Competition Policy*, (WBG African Competition Policy Report quoted, Foreword and Chapter A
203. WBG African Competition Policy Report, quoted, page 7
204. WBG African Competition Policy Report, quoted, Foreword

"Africa has a lot to gain from **removing policy and regulatory restrictions** and **strengthening the effectiveness of its competition law and policy framework**, including in terms of economic growth."[205]

In the WBG African Competition Policy Report, telecommunications is highlighted as a sector where more could be done to unlock Africa's potential. African countries have "the highest final prices for mobile broadband services in the world," and internet use is the second-lowest among the regions after South Asia,[206] These and other related figures need to be considered in context, however. Even if competition law has not been applicable across all African countries, regulation of telecommunications operators in Africa has been in force for as long as liberalisation itself. Something is not quite right with the current systems of regulation. Perhaps there is an issue with over-regulation, or regulation that does not follow principles of best practice: "... policies such as state aid and price controls affect the development of competition in markets, but only in a few cases is competition analysed in granting state aid or setting price controls."[207]

On the other hand, there are encouraging results to come out of those countries where the regulatory and competitive environment encourages investment. For example, 4G is gaining traction in countries such as **Mauritius**, **Namibia** and **South Africa**, early-adopter markets (and countries that have adopted a competition law alongside a regulatory framework).[208]

By all accounts, the continent is developing at a very rapid pace. Connectivity is allowing digital services to reach remote areas. The mobile industry in Sub-Saharan Africa continues to scale.[209] Investment by the operators across the region, in expanded network and mobile broadband networks,[210] is paying off: 367 million subscribers have been reached in mid-2015, although subscriber growth rates are set to slow sharply over the coming years. Migration to higher-speed networks and smartphones continues apace, mobile broadband connections are set to increase from just over 20% of the connection base today to almost 60% by the end of the decade. Falling device prices are encouraging the adoption of smartphones, with the region set to add more than 400 million new smartphone connections by 2020, by which time the smartphone installed base will total over half a billion. This is still just under half the population, against the global average of almost 60%.[211] This is not just due to costs and coverage, but also literacy, confidence, trust in the internet and availability of locally relevant content. It is often forgotten that the digital economy is about much more than connectivity and price.[212]

205. WBG African Competition Policy Report, page 7, and this is of course not just true for Africa.
206. WBG African Competition Policy Report, quoted, Executive Summary
207. WBG African Competition Policy Report, quoted, Executive Summary, page viii, emphasis added
208. GSMA report *The Mobile Economy*, Sub-Saharan Africa 2015, (GSMA (2015)) http://gsmamobileeconomy.com/ssafrica/
209. GSMA (2015), quoted.
210. Capital investment in 2014 totalled $9billion, and is set to reach $13.6 billion (24% of the total) by 2020
211. GSMA (2015) quoted, page 7
212. As seen above, Introduction.

Policymakers, regulators and competition authorities must work together towards implementation of a system of competition policy (law and regulation) capable of tackling the issues that arise, but to forebear from intervention whenever possible, applying instead competition law rules that are applicable to the economy as a whole. Policymakers and agencies should consider the recommendations highlighted in Figure 3. Following these recommendations will ensure that the five features of best practice in competition policy identified in Figure 2 are adopted. These are reproduced below.

Figure 2: (reproduced again below) Five Features of Best Practice in Competition Policy

1	A **properly functioning competition authority** and a **properly functioning regulator**, i.e., that are independent of government, properly staffed and resourced.
2	Economic regulation must address **market failures**, based on evidence from up-to-date market reviews. Regulators must be clear about the reasons for, and impact of, regulation in all cases.
3	Ideally, **competition law should be enforced by a competition authority**. If the regulator has **sectoral competition law powers**, the need for cooperation between agencies is greatest.
4	Both competition authority and regulator understand **the interplay** between their respective jurisdictions and **work together** to address the issues identified.
5	There is appropriate, **meaningful cooperation** between competition authorities and regulators at the supranational level too.

Feature 1: A properly functioning regulator and a properly functioning competition authority

Traditionally, countries across Sub-Saharan Africa have adopted a system of sectoral regulation, but no generally applicable competition law. In most countries, there exists a regulator, whereas even now competition rules are not universally adopted. This approach might have been suitable at a time before convergence. The changes brought about by the digital economy require more reliance on generic competition law.[213] Relying solely on sector-specific regulation brings a serious risk that the rules applied do not respect technology neutrality, leading to a playing field that disadvantages regulated sectors.

All countries reviewed have an active regulator with powers to regulate the telecommunications sector at least. This appears to be due to the same historical reasons that regulation of the sector has been traditionally imposed, including the link between WTO trade agreements and liberalisation and regulation of the sector.[214] In some countries where there is not generally applicable competition law (e.g., **Nigeria** and **Uganda**), the regulator is empowered to apply competition law to the sector, resulting in a lopsided system of extra scrutiny for the telecoms operators and no scrutiny in regulation or competition law for market players in other sectors, including in the digital economy. This has serious consequences for the competitiveness of the sector.

Sub-Saharan Africa is a relative newcomer to the adoption of generally applicable competition laws, although the pace of adoption has increased in recent years. Of 50 countries reviewed, only 14 have functioning competition laws. These are the countries shaded in green in Figure 35. The countries that belong to the West African Economic and Monetary Union (WAEMU, see Figure 43) have adopted a centralised, supra-national exclusive system of applying competition law, resulting in less wide-ranging enforcement at the national level, even in those countries that have a national competition law. The countries are **Burkina-Faso, Côte d'Ivoire, Mali, Senegal and Togo**[215] and are shaded in blue in Figure 35. The WAEMU countries shaded in yellow (**Burundi, Madagascar, Mozambique** and **Rwanda**) have adopted a competition law framework but do not have a properly functioning competition law. Generally speaking, funding and resourcing of the competition authorities is an issue across Sub-Saharan Africa, and the effectiveness of competition policy enforcement variable (see Figure 45). Even so, in those countries where competition law has been adopted, a number of recent cases involving the telecoms sector (see Figure 46), show that where competition law is available, it is capable of addressing issues identified. This should lead to a better understanding that *ex ante* regulation may not be needed in all cases, where competition law exists. Regulatory forbearance for a level playing field is a cornerstone for the development of a digital economy.

213. See Rachel Alemu, *Regulation of Competition in the Liberalised Telecommunications Sector in Sub- Saharan Africa: Uganda's Experience*, http://www.compcom.co.za/wp-content/uploads/2014/09/south-africa-conference-on-competition-law.pdf
214. As seen above, regulation of telecommunications is a requirement under WTO GATS rules and 82 countries have committed to the regulatory principles in the so-called "Reference Paper". There is no equivalent commitment to adopt a competition law framework.
215. **Angola, Guinea Bissau, Niger** are WAEMU countries without national competition laws.

Feature 2: Economic regulation addresses market failures and the regulators are clear about reasons to regulate and impact of regulation

Appendix 2 provides guidance on the system of SMP regulation, based on EU precedent, including flowcharts of two worked examples.

It appears that across Sub-Saharan Africa regulation is too often imposed in the absence of a clear understanding of the market dynamics. The effects that this has, particularly when regulation is imposed at the retail level, without a proper understanding of the competitive forces at play are exemplified in Figure 12.

There are countries where SMP or regulation based on the market power of the entity to be regulated is enshrined in the legislative and operational framework. These include South Africa, the country with the most comprehensive competition policy enforcement in the region; Burkina-Faso, a WAEMU country; and Nigeria and Uganda, the latter two of which have no generally applicable competition law, but the regulator has competition law powers in the sector. The dividing line between *ex post* competition law and *ex ante* regulation does not seem very clear. This is of special concern to the mobile industry, especially in spectrum policy and spectrum assignment, as more particularly detailed.

Feature 3: Ideally, competition law powers should be exercised by the competition authority

Policymakers considering a model where the regulator applies competition law to the sector it regulates should be aware of the potential for divergent application of the rules relative to the rest of the economy, and of the risk that resources may be diverted from funding the competition authority (with its remit across the economy), towards funding a regulator with jurisdiction limited to the sector. This could limit the gains of proper enforcement of the competition rules for the economy as a whole.

Policymakers considering changes to the system of competition policy overall, or the adoption of a new competition policy, may also consider a model where sectoral regulators could be integrated within competition authorities. This model has not yet been adopted in countries in Africa (it has been adopted in New Zealand, Estonia, The Netherlands and in Spain) but particularly where competition policy expertise may be scarce, the integrated model could achieve synergies that would harness the broad expertise of both regulation and competition specialists, enhancing the quality of decisions.

Figure 34: Existing models in competition policy — Africa

	Two agencies: Competition authority and separate sectoral regulator	**Two agencies:** Regulator with concurrent powers in competition law	**Two agencies:** Regulator with exclusive jurisdiction to apply to telcos competition law	**One agency:** Only the regulator, only regulation	**One agency:** Only the regulator, which has competition law and regulatory powers
EXAMPLES	14 countries with competition authorities	A number of WAEMU countries; Merger control in some countries	Dividing line not always clear between agencies' jurisdiction	Countries without competition law	Nigeria Uganda
POSITIVES	Ensures that competition law is applied equally to all sectors of the economy	Ensures that competition law should be applied with sector knowledge, but competition authority retains ability to consider issues too	Ensures that competition law should be applied with sector knowledge. No safeguard of competition authority's involvement.	Convenience. Country complies with WTO Reference Paper	Gives the regulator formidable powers
NEGATIVES	Need for the agencies to understand their roles and to cooperate	Risk of confusion about the jurisdiction of the agencies. Regulators tend to apply regulation more than competition law. The competition authority defers.	Risk of over-reliance on regulation of the sector. Risk that regulator applies regulatory categories when acting in competition law.	Especially with convergence in the digital economy, only telcos are subject to scrutiny. Non-level playing field.	Only the telcos are subject to two layers of scrutiny: competition law and regulation. Non-level playing field x2

Feature 4: The competition authority and the regulator understand the interplay between their respective jurisdictions and work together

The need for coordination between the competition authority and the telecoms regulator seems to be understood in Sub-Saharan Africa, where the two agencies have formal agreements (MoUs) to coordinate and decide on their respective jurisdiction in four countries out of the 14. In **Zambia** there is a more formal system of representation by the competition authority on the board of all regulators (and the regulators must consult with the competition authority when enacting measures in competition policy).

The need for proper coordination is at its most acute in the case of merger control for concentrations amongst the mobile operators. A number of case studies from South Africa to Tanzania and Nigeria show the potential costs of a lack of coordination in this field.

Feature 5: There is appropriate meaningful cooperation between competition authorities and regulators at the supra-national level too

Figure 35 provides an overview of the countries in Sub-Saharan Africa and the regional intergovernmental organisations to which these belong.[216] There are seven main regional organisations and three of them, namely COMESA, EAC and SADC have launched the Tripartite Free Trade Area initiative, which could potentially lead, if the Treaty is ratified, to a vast African free-trade area.

Sub-Saharan Africa is home to the two most ambitious experiments in centralised supra-national enforcement of the competition rules, by COMESA and WAEMU, and in a number of regional intergovernmental organisations, plans are afoot for closer supra-national adoption of competition frameworks. These experiments are useful. The experience gained so far shows the importance to ensure that the jurisdiction of the respective national and supra-national agencies is clearly thought through when setting out to create such frameworks. If this is done right, there is a great potential to align decisions of national agencies and to reduce transaction costs, and this would help with the creation of a predictable cross-border business environment.

If the rules are not very clear, however, centralised enforcement may lead to an undesirable creation of extra regulation and act as an impairment to competition.

216. The African Union, pan-African organisation, is considered below, at Figure 36.

Figure 35: Africa - membership of intergovernmental organisations and competition law[217]

COUNTRY	CEMAC†	COMESA	EAC†	ECOWAS†	SACU**	SADC**	WAEMU
Angola						✓	✓
Benin				✓			
Botswana					✓	✓	
Burkina-Faso				✓			
Burundi		✓	✓				✓
Cabo Verde				✓			
Cameroon	✓						
Central African Republic	✓						
Chad	✓						
Comoros		✓					
Congo (Brazzaville)	✓						
Congo (Democratic Republic of)		✓				✓	
Côte d'Ivoire				✓			✓
Djibouti		✓					
Equatorial Guinea	✓						
Eritrea		✓					
Ethiopia		✓					
Gabon	✓						
Gambia (The)				✓			
Ghana				✓			
Guinea				✓			
Guinea Bissau				✓			✓
Kenya		✓	✓				
Lesotho					✓	✓	
Liberia				✓			

GREEN denotes countries with a national competition law and a functional competition authority. **BLUE** denotes countries with a competition authority with limited mandate. **YELLOW** denotes countries with competition law but no functioning authority.
** **SACU** and **SADC** have established cooperation mechanisms on enforcement of competition laws but do not contain a supra-national competition law framework.
† **CEMAC**, **EAC** and **ECOWAS** have a competition law framework but no functioning competition authorities.

217. Note that **COMESA**, **EAC** and **SADC** have entered into a Treaty for the creation of the **Tripartite Free Trade Area**. When the Treaty is ratified, this trading block will cover about half of Africa, whether measured by membership or by economic or geographic size.

Figure 35 (continued): Africa - membership of intergovernmental organisations and competition law

COUNTRY	CEMAC†	COMESA	EAC†	ECOWAS†	SACU**	SADC**	WAEMU
Madagascar		✓				✓	
Malawi		✓				✓	
Mali				✓			✓
Mauritania							
Mauritius		✓				✓	
Mozambique						✓	
Namibia					✓	✓	
Niger				✓			
Nigeria[218]				✓			
Réunion							
Rwanda		✓	✓				
Sao Tomé and Principe							
Senegal				✓			✓
Seychelles		✓				✓	
Sierra Leone				✓			
Somalia							
South Africa					✓	✓	
Sudan		✓					
Swaziland		✓			✓	✓	
Tanzania			✓			✓	
Togo				✓			✓
Uganda		✓	✓				
Western Sahara							
Zambia			✓			✓	
Zimbabwe			✓			✓	

GREEN denotes countries with a national competition law and a functional competition authority. **BLUE** denotes countries with a competition authority with limited mandate. **YELLOW** denotes countries with competition law but no functioning authority.
** **SACU** and **SADC** have established cooperation mechanisms on enforcement of competition laws but do not contain a supra-national competition law framework.
† **CEMAC**, **EAC** and **ECOWAS** have a competition law framework but no functioning competition authorities.

218. Nigeria is periodically rumoured to be introducing a generally applicable competition law. In the meantime, the Communication Commission has powers to tackle anticompetitive practices, limited to the communications sector as defined. See for example: https://www.addleshawgoddard.com/globalassets/insights/africa-2016/could-nigeria-have-a-competition-law-regime-within-the-year.pdf

Intergovernmental organisations tend to operate in silos; there is no sustained coordination between the competition agenda and the telecoms regulatory agenda in the main intergovernmental organisations surveyed. However, cooperation among regulators and, separately, among the competition authorities is well established in Sub-Saharan Africa where, in the absence of formal jurisdictional bright lines, the agencies have entered into MoUs, nationally and internationally.

Regarding supra-national initiatives in the telecoms sector and in competition law:

- Specific initiatives are aimed at the telecommunications sector within the overarching framework of the African Union (see Figure 36). The East African Community (EAC) created a regional ICT organisation, EACO, which brings together regulators, telecoms operators, postal service providers and broadcasters, as well as academics and other stakeholders. This could be a good forum for extended participation by the competition authorities too. The EAC has also been active in seeking to promote infrastructure investment. It is also seeking to implement a framework for roaming charges. The Economic Community of West African States (ECOWAS) has been amongst the most active in the telecoms field, leading to initiatives for the development of broadband infrastructure and submarine cables. ECOWAS is also currently considering a supra-national initiative relating to roaming charges. The Common Market for Eastern and Southern Africa (COMESA) had ambitious plans to create a centralised telecoms regulatory body and a limited liability company to finance infrastructure projects (COMTEL) which, in the intention of the creators would have spearheaded telecoms projects of common interest across the COMESA countries. Underscoring the difficulties of international cooperation, these early plans appear to have been shelved.
- The regulators of the COMESA countries, the SADC countries and the ECOWAS countries are also formally organised into groups, ARICEA, CRASA and WATRA, respectively.
- Sub-Saharan Africa is home to two remarkable experiments in centralised enforcement of competition law, namely COMESA's and WAEMU's centralised enforcement. Both experiments have shortcomings but, after the initial teething issues have been addressed, COMESA seems to be on its way to becoming a fully-fledged supra-national competition authority, not only for merger control. The coordination with the competition authorities of the Member States within the COMESA countries has been partly tackled by MoUs between the COMESA authority and the competition authorities in the Member States.[219]

219. The competition authorities of nine of the members of SADC have also entered into MoUs, whilst there are also a number of bilateral agreements between competition authorities in different countries. The African Competition Forum which acts as a centre for repository and dissemination of best practice in competition law.

Regulation

A regulatory regime that supports change and innovation is a precondition for a level playing field in the digital economy. A system of regulation based on regulatory forbearance when competition law is sufficient to deal with the issues identified, and on the finding of a market failure as the basis for regulation, reduces the risks of over-regulation. In a number of countries across Sub-Saharan Africa there seems to be some confusion as to the respective roles of *ex ante* sectoral regulation based on market assessment and a finding of a market failure, and the enforcement of competition law. Coordination at the international level helps to ensure that operators that work across Sub-Saharan African countries are faced with similar substantive rules, and can be heard more easily by all regulators involved in any one issue.

National laws

It is difficult to find reliable sources to assess how many countries in Sub-Saharan Africa have adopted a regulatory approach based on an assessment of market power and remedies to be imposed based on a finding of market failure.

It appears that **Burkina-Faso**, **Nigeria, South Africa**[220] and **Uganda**[221] have a formal system based on SMP regulation. **Nigeria**,[222] and **Uganda** are countries where there is no generally applicable competition law, but there are sector-specific competition statutes and regulations.[223] The regulator can also apply competition law to the communications sector, and only to the sector. In countries when this happens, telecommunications operators, already subject to sector-specific regulation, experience an extra layer of scrutiny, to which other sectors (and their competitors in the digital sphere) are immune because there is no generally applicable competition law. The lack of generally applicable competition law has serious implications for the economic development of a country, as seen above (see Figure 7).

In **Ghana**, the regulator, NCA, has commissioned a market study and it is expected that the adoption of an SMP system will be supported by the findings in this report.

In countries where there is no generally applicable competition law and no formal system of SMP regulation, there is a risk that regulation will be applied without proper regard to the impact it

220. One of the far-reaching implications of the Electronic Communications Act 2005 ECA is the introduction of SMP as a basis on which to impose regulatory obligations ICASA may impose pro-competitive conditions on any operator that has SMP
221. http://www.ucc.co.ug/data/pubs/115/Market-Definition.html
222. Antitrust/competition bills are presently been considered by the National Assembly in Nigeria. In addition to the telecoms regulator's 'Competition Practices Regulation 2007', a Bill is currently being considered in parliament for the establishment of a Federal Competition Commission in Nigeria, as well as a separate bill to repeal the Act which sets up the Consumer Protection Council and give the Council the powers also to enforce competition within Nigeria. It is expected that the two Bills will be merged into one.
223. In Nigeria, the Competition Practice Regulations are applicable only in the telecoms sector. See Chukwuyere E. Izuogu, *Regulating Anti-Competitive Practices in Nigeria's Communications Sector, 2016, forthcoming publication (expected last quarter of 2016).* The NCC enforces competition law in the sector (see Figure 50: case study MTN/Visafone). In Uganda, "In the pursuit and achievement of the functions highlighted, the UCC conducts and implements regulatory interventions in the retail and wholesale markets, defines and assesses the markets it regulates, and investigates abuses therein. In addition, the UCC evaluates mergers, acquisitions and license transfers for anti-competitive practices." (see http://www.ucc.co.ug/data/pubs/115/Market-Definition.html)

has on the competitive landscape, although in some countries, such as in **Angola** the regulator (INACOM)[224] must take into account the general principle of fair competition as well as the avoidance of concentration in the telecommunications market before making a decision.

One interesting observation can be made regarding the countries that belong to the West African Economic and Monetary Union (WAEMU). The adoption of a centralised WAEMU competition law framework has meant that in WAEMU states, pre-existing competition laws at the national level have been demoted, in favour of a centralised application by the WAEMU Commission, which has not been very active. Alongside the WAEMU centralised system, it seems that the countries have adopted **a sector-specific system of 'competition regulation', without a clear demarcation line between competition law and SMP regulation**. It appears that the differences between applicable competition law (which applies *ex post* to anticompetitive practice) and regulation based on the market power of the operators subject to it are not very well understood (see Figure 1 for a high level review of key differences). In a sense, this provides an example of a system where the national regulators have some powers of competition enforcement alongside the WAEMU competition authority whereas the existing competition authorities do not. This feature may explain why there could be encroachment of the national regulatory function, to be able to act in preference to a supra-national competition authority which does not appear to have been very active.

So for example in **Senegal** sectoral anticompetitive practices are explicitly dealt with in the Code of Telecommunication.[225] In **Togo**, the Law on Telecommunications refers to anticompetitive practices. Similarly in **Benin**, the Telecommunications Regulation also includes provisions on anticompetitive practices, and enforcement takes place before the competent courts. The same approach is adopted in **Niger**: anticompetitive practices are referred to in the Telecommunications Regulation; however, they are enforced before the competent courts. In the **Côte d'Ivoire**, on the other hand, the Law on Telecommunications does not specifically govern anticompetitive practices and its telecommunications agency does not have competence on antitrust issues.[226] In **Mali**, a similar approach is followed: anticompetitive practices in specific sectors fall under the scope of the general competition authority (or tribunal).

The potential confusion between economics regulation and competition law (explained briefly above, see Figure 13) appears to be present in other countries in Sub-Saharan Africa. In **Kenya**, an amendment to the Kenya Information and Communications Act (KICA), 1998, introduced in 2015, now provides that declarations on 'dominance' made by the Communications Authority of Kenya for regulatory purposes must involve consultations with the Competition Authority of Kenya and that due process must be followed before any such declarations are made. The differences between the two approaches have been highlighted above: the competition authority's role is to consider a market in a narrow sense, usually in response to a complaint or because it investigates a merger. The determination for regulatory purposes has a different purpose, mainly identifying market failures in an *ex ante* context. The two agencies could theoretically cooperate but the situation in Kenya is further complicated because dominance for the purposes of regulation

224. *Getting the Deal Through,* Telecoms and Media https://gettingthedealthrough.com/area/39/jurisdiction/151/telecoms-media-angola/
225. "The Regulation Agency of Telecommunications and Postal Services holds the competence to deal with anticompetitive practices in the telecommunications sector through the derogation of the Law of 1994 on prices, competition and economic litigation." See M. Bakhoum / J. Molestina: Institutional Coherence And Effectivity Of A Regional Competition Policy: The Case Of The West African Economic And Monetary Union (Waemu), Max Planck Institute for Intellectual Property and Competition Law, Research Paper No. 11-17, November 2011, http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1965508 , page 9
226. Ibid., pages 9 and 10

and dominance for the purpose of competition law are considered taking into account different criteria.[227] This approach could conceivably lead to difficulty with enforcement. For a recent competition law case decided in Kenya, see Figure 46.

Intergovernmental organisations

The countries listed in Figure 35, together with a number of countries in North Africa, are members of the African Union, an ambitious pan-African organisation comprising both political and administrative bodies (see Figure 36).

In terms of competition policy, however, the main organisations active in Africa are the so-called Regional Economic Communities (or RECs). In Figure 35, the countries that makeup each of the main RECs are listed (and the countries that belong to more than one organisation). Overall, seven main intergovernmental organisations with a remit on trade and economic policy are active in Sub-Saharan Africa, and in some cases countries belong to several organisations. Whilst this is understandable in light of the differences among countries and the sheer vastness of the sub-continent, there may be a risk of fragmentation and dispersion of resources. One answer to the concerns with the proliferation of intergovernmental organisations is the so-called Tripartite Free Trade Area, which was officially launched in June 2015.[228] When ratified, the Treaty will cover three regional economic communities, COMESA, EAC and SADC, for a total of 26 countries and about "half of Africa, in terms of membership, economic and geographic size." Its aim is to achieve a single policy framework in specific regulatory areas (rules of origins; standards [health and technical] customs cooperation, trade facilitation, trade remedies, non-tariff barriers and dispute settlement) as well as general principles and rules on trade.

The African Union and each of the seven intergovernmental organisations will be considered below, putting the focus on their activities in the telecoms sector.

227. For the purposes of regulation, three criteria are considered: *"(a) the market share of the telecommunications service provider being at least* ***fifty percentum of the relevant gross market segment****; (b) significant market power enjoyed by the telecommunications service provider; and (c) any other consideration the Authority may determine.* The criteria to be considered by the competition authority for the determination of dominance suggest that the dominant firm must have at least 50% market or share of supply share in the relevant market. See the article in http://blog.cipit.org/2016/01/26/recent-amendments-on-dominant-position-blur-line-between-competition-law-and-kenya-information-and-communications-act/
228. http://www.comesa.int/zambia-signs-tripartite-free-trade-area-agreement/

Figure 36: The AU, African Union

Members: The AU comprises all the countries listed in Figure 35 and a number of countries in North Africa. The notable exception is Morocco, which opted to leave the predecessor organisation over the recognition of the Sahrawi Arab Democratic Republic (Western Sahara) as a Member State (in 2016 Morocco announced its intention to re-join).[229]

History:[230] The AU was launched in 2002, replacing the previous Organization of African Unity (OAU). On 9 July 2011, South Sudan became the 54th African Union (AU) member. Overall, the African Union has 12 main goals, including Economic Affairs, Trade and Industry and Infrastructure (and energy). It is made up of both political and administrative bodies. The Assembly, made up of Heads of State and Governments, is the highest decision-making body. The Pan African Parliament is elected by the Parliaments of the member states. Administratively, the AU Commission is the secretariat of the political institutions, headquartered in Addis Ababa, Ethiopia.

Cooperation in the telecoms sector: The main[231] project by the African Union in this area is the Programme for Infrastructure Development in Africa (PIDA). This was created by a the African Union Commission, in partnership with the United Nations Economic Commission for Africa, African Development Bank and the NEPAD Planning and Coordinating Agency. PIDA is based on regional projects and programmes, and aims to help address the infrastructure deficit in Africa.

In the ICT sector, the aim of the ICT PIDA programme is to establish an enabling environment for completing the land fibre-optic infrastructure and installing internet exchange points in countries without them. The intention is that, through PIDA, each country will be connected to two different submarine cables to take advantage of the expanded capacity. Three programmes have been identified, all continental in scope:

- ICT Enabling Environment: to improve the environment for the private sector to invest in high-speed broadband infrastructure;
- ICT Terrestrial (for Connectivity): with two main components, namely to secure each country connection by at least two broadband infrastructures and to ensure access to submarine cable to all landlocked countries; and
- Internet Exchange Point Programme: to provide Africa with adequate internet node exchange to maximise internal traffic.

During the 2nd Conference of African Ministers in charge of Communication and Information Technologies (CITMC-2), Member States of the African Union (AU) adopted the Reference Framework for Harmonization of the telecommunications and ICT Policies and Regulation in Africa (Cairo, 2008).

Harmonisation of policies and regulations in the ICT sector is the focus of the ITU/European Commission so-called HIPSSA (Harmonisation of ICT Policies in Sub-Saharan Africa) programme.[232]

229. See: http://www.bbc.co.uk/news/world-africa-36822240
230. See: http://www.au.int/en/history/oau-and-au
231. See: http://www.afdb.org/fileadmin/uploads/afdb/Documents/Project-and-Operations/PIDA%20note%20English%20for%20web%200208.pdf
232. The programme has been instrumental in helping the RECs in Africa to develop their own guidelines, listed in Figures 36 – 42. See http://www.itu.int/en/ITU-D/Projects/ITU-EC-ACP/HIPSSA/Pages/default.aspx

Figure 37: CEMAC, the Economic and Monetary Community of Central Africa

Members: CEMAC comprises six member states: **Cameroon**, Central African Republic, Chad, Congo (Brazzaville); Equatorial Guinea; Gabon. Of these, only Cameroon (in bold) has enacted a domestic competition law.

History: CEMAC is the product of two different unions: the Economic Union of Central Africa and the Monetary Union of Central Africa. It was set up in 1994, against the backdrop of successive African economic crises. Its principal objective is to establish a closer union between its member states, including the creation of an internal market and the abolition of obstacles to trade.

Cooperation in the telecoms sector: Security issues and slow economic growth in Central Africa have impaired the ability of CEMAC to deliver on projects of common interest, although growth was recorded in 2014.[233]

233. International Monetary Fund, IMF country report 15/222, CEMAC, August 2015 https://www.imf.org/external/pubs/ft/scr/2015/cr15222.pdf

Figure 38: COMESA, Common Market for Eastern and Southern Africa (COMESA)

Members: In SSA: Burundi, Comoros, Congo (Democratic Republic of), Djibuti, Eritrea, **Ethiopia**, **Kenya**, Madagascar, **Malawi**, Mauritius, Rwanda, **Seychelles**, Sudan, **Swaziland**, Uganda, **Zambia, Zimbabwe** (countries in bold have domestic competition laws). COMESA also comprises Egypt and Lybia.

History: The treaty establishing the Common Market for Eastern and Southern Africa (COMESA) was signed on 5 November 1993 in Uganda and was ratified a year later in Malawi. Within the COMESA framework, Member States are tasked with the responsibility to provide the conditions for economic integration, which is understood in a "broader (European) sense as extending from creating a common legislative framework to the mutual recognition of standards and qualifications."[234] Competition law is an important aspect in this framework and COMESA has created the most wide-ranging multilateral system of competition law and enforcement among the countries surveyed.

COMESA covers other regional organisations, including the East African Community (EAC) and the Southern African Development Community (SADC). COMESA has very good working relations, formally and informally, with all the regional organisations on the continent. A Memorandum of Understanding was signed with the EAC. The EAC has agreed to adopt and implement the COMESA trade liberalisation programme.

Cooperation in the telecoms sector: COMESA was instrumental in setting up the forum for cooperation amongst regulators known as ARICEA. It created a Telecommunications Connectivity and Harmonisation programme with the objective to achieve telecoms interconnectivity and development. COMESA "initiated the establishment of a private, limited liability company, COMESA Telecommunications Company, COMTEL, set-up to finance infrastructure projects. COMTEL's main aim is to "build an asynchronous transmission mode (ATM) system that will link national systems together," while also recognising that "there is a need for all countries in COMESA to continue to develop and improve national infrastructures."[235] In telecoms, "The establishment of COMTEL and the harmonisation of telecoms regulatory policies are priority activities of COMESA."[236] However:

- COMTEL has not been able to raise the necessary funds to support its aim and the project seems to be effectively dead,[237] replaced by bilateral agreements for fibre link development; and
- concerning the harmonisation of telecoms regulatory policies, early plans to set up a Telecoms Regulatory Body appear to have been shelved.

234. Dubbah, page 416 abd following
235. http://www.comesa.int/comesa-strategy/
236. Ibid.
237. Balancing Act, *COMESA Chairman blasts Africa telecoms infrastructure investment*, 17 April 2009, http://www.balancingact-africa.com/news/en/issue-no-450/money/comesa-chairman-blas/en

Figure 39: EAC, East African Community

Members: Burundi, **Kenya**, Rwanda, **Tanzania** and Uganda. Kenya and Tanzania have a domestic competition law.

History: The Treaty for the Establishment of the East African Community (EAC) was signed in November 1999 and came into force in July 2000 and since then it has been revised on two occasions, once in 2006 and then again in 2007. In 2004, a Protocol on the Establishment of the East African Community Customs Union (the 'Protocol') was signed This builds upon the provisions of the treaty.[238]

Cooperation in the telecoms sector: is mandated by the treaty.[239] The EAC has had a pivotal role in Analog-to-Digital Broadcast Migration, resulting in all countries switching by January 2015. The EAC Secretariat worked with the International Telecommunication Union and the European Union to support a programme for harmonising ADBM among EAC Partner States. On roaming, in February 2015, the EAC Summit directed the Council to expedite implementation of the Framework for Harmonised EAC Roaming Charges for mobile communication services by July 2015. The Heads of States also directed the removal of surcharges for international telecommunications traffic originating and terminating within the East African Community by July 2015.

The EAC website[240] lists the following projects for harmonisation of policies and frameworks:

- Harmonization of ICT policies, laws and regulations: a Regional Framework for Harmonization of National ICT Policies and a Study on the EAC Communications Regime provide recommendations on harmonizing the ICT policies and regulations of Member States.
- East African Communications Organisation (EACO): regional ICT organization under a public private partnership arrangement that brings together national ICT regulators, telecommunications, broadcasting, and postal operators/service providers, academia and other associated stakeholders.
- EAC Legal Framework for Cyber Laws: Two frameworks have been developed by the EAC in collaboration with UNCTAD. These are EAC Framework for cyberlaws Phase 1 (Framework 1, addressing electronic transactions; electronic signatures authentications; cybercrime; consumer protection; and data protection and privacy) and cyberlaws Phase II (Framework II, addressing intellectual property; competition; e-taxation; and information security).

238. Maher M. Dabbah, quoted, page 245
239. Art 98 and 99
240. http://www.eac.int/infrastructure/index.php?option=com_content&view=article&id=128&Itemid=141

Figure 39: EAC, East African Community

Two ongoing infrastructure projects also have a component of harmonisation of regulatory and policy frameworks.

- East African Community Broadband ICT Infrastructure Network (EAC-BIN). A study on the detailed pre-investment analysis and technical design for this network and was commissioned in May 2009, and the final report finalised by the end of February 2010. The final report recommended a protocol on ICT networks was pre-requisite for the implementation of cross-border ICT networks.
- In 2012, The Council adopted the EAC Protocol on ICT Networks, which seeks to promote, among others, the "harmonization of ICT policies, laws and regulations".

Figure 40: ECOWAS, Economic Community of West African States (French: CEDEAO)[241]

Members: Benin, **Burkina-Faso**, Cabo Verde, Côte d'Ivoire, **Gambia (The)**, Ghana, Guinea, **Guinea-Bissau**, Liberia, **Mali,** Niger, Nigeria, **Senegal**, Sierra Leone and Togo. (Countries in bold have adopted national competition laws).

History: Founded on 28 May 1975, with the signing of the Treaty of Lagos, ECOWAS' mission is to promote economic integration across the region.

Cooperation in the telecoms sector:[242] ECOWAS was instrumental in setting up the forum for cooperation amongst regulators known as WATRA. WATRA has in turn been instrumental in making calls for supra-national regulation of roaming charges and ECOWAS is now considering this issue.[243]

Telecommunications priorities are: (i) the development of a reliable and modern regional telecoms broadband infrastructure (including the INTELCOM II programme); (ii) alternative broadband infrastructures and submarine cables; and (iii) the establishment of single liberalised telecoms market.

So far 11 coastal Member States have been connected to submarine cables with at least one new landing station. The three landlocked countries (**Burkina Faso**, **Mali** and **Niger**) have now at least two access routes to the submarine cables.

The Ministers also agreed to work with telecommunications operators in the region to implement a proposal for a 50% region-wide reduction in the cost of telecommunications services on the ECOWAS Day (May 28th) for the benefit of the citizens and for regional integration purpose.

241. French: Communauté économique des États de l'Afrique de l'Ouest, CEDEAO
242. See: http://ecoslate.github.io/ecowas-sectors/telecommunications/index.htm
243. See: http://www.balancingact-africa.com/news/telecoms_en/18674/ecowas-and-watra-see-regional-roaming-as-next-big-business-for-gsm-operators

Figure 41: SADC,[244] Southern Africa Development Committee

Members: Angola, **Botswana**, the **Democratic Republic of Congo**, Lesotho, Madagascar, **Malawi**, **Mauritius**, Mozambique, **Namibia**, **Seychelles**, **South Africa**, **Swaziland**, **Tanzania**, **Zambia** and **Zimbabwe**. (Countries in bold have adopted national competition laws).

History: The Southern African Development Coordinating Committee (SADCC) was established in 1980 but changed its name to the Southern Africa Development Committee (SADC) in 1992.

Cooperation in the telecoms sector: SADC was instrumental in setting up the forum for cooperation among regulators now known as CRASA, the first such forum, which was the blueprint for both ARICEA (set up by COMESA) and WATRA (the ECOWAS equivalent forum). SADC has been moving towards regional integration through the development and implementation of projects in telecommunications policy, legislative and regulatory framework harmonisation, internet and broadband infrastructure development, harmonisation of telecommunications infrastructure, and joint programme implementation, including:

e-SADC Strategy Framework: Launched in 2010, include, among others, the setting up of national and regional internet exchange points, harmonisation of Cyber Security Regulatory Frameworks and a regional project to improve interconnection;

SADC Protocol on Transport, Communications and Meteorology: Signed by SADC governments in August 1996, the SADC Protocol on Transport, Communication and Meteorology is the cornerstone of telecommunications development in the region. It calls for the setting up of autonomous regulators, and the creation of a regional association of regulators. This resulted in the creation of the regional regulatory body — the Telecommunications Regulatory Association of Southern Africa (TRASA) in late 1997, now the Communications Regulatory Authority of Southern Africa (CRASA).

244. Maxwell Chanakira, *Towards regional economic integration in telecommunications: the case of SADC* October 2011, http://www.dounia-risri.net/IMG/pdf/Dounia4_pp79-95.pdf

Figure 42: SACU,[245] Southern African Customs Union

Members: Botswana, Lesotho, Namibia, South Africa and Swaziland

History: The Southern African Customs Union (SACU) is the world's oldest customs union. It was established in 1889 as a Customs Union Convention between the British Colony of Cape of Good Hope and the Orange Free State Boer Republic. Together these countries form a single customs territory, which has a single tariff applicable throughout it and no customs duties between the member states. The current SACU Agreement was signed in 2002 and several independent bodies — including an independent administrative secretariat to oversee SACU — so as to ensure that member states participate equally.

Cooperation in the telecoms sector: SACU's remit does not include in-depth cooperation in the telecoms sector.

Figure 43: WAEMU, West African Economic and Monetary Union

Members: Benin, Burkina Faso, Côte d'Ivoire, Guinea Bissau, Mali, Niger, Senegal and Togo. (Countries in bold have adopted national competition laws but in the light of the centralised system of competition law enforcement in WAEMU, these have a limited mandate).

History: The West African Economic and Monetary Union (WAEMU) was established in 1994 as a union between eight African countries.. It has general economic objectives, which include the elimination of all tariff barriers on intra-Community trade; this has been achieved through a series of reforms started in 1996.

Cooperation in the telecoms sector: although one of the objectives of WAEMU is to coordinate national policies and, possibly lead to common policies in infrastructure and, specifically, in telecommunications, the Union does not appear to have been active in sectoral regulation of telecommunications.

245. SACU has a fairly developed institutional structure under the 2002 Agreement with a Commission, Council of Ministers, a Tribunal and a Trade and Industry Liaison Committee. The Commission is made up of senior officials from the ministries of finance and trade from each member state. It is responsible for the implementation of the 2002 Agreement and facilitates the implementation of the Council's decisions. The Council of Ministers consists of ministers of finance and trade from each member state and it is the supreme decision-making authority in SACU matters. The Tribunal is intended to be ad hoc and reports directly to the Council. Its aim is to adjudicate on any issue concerning the application of the 2002 Agreement or any dispute arising under it, but only at the request of the Council. See Maher M. Dabbah, quoted, page 422

Competition Law

One of the important elements of a regulatory regime that supports change is that regulation should only be introduced when competition law is not sufficient to deal with the issues. For this to be a reality, it is important not only that there should be a competition authority properly functioning in a country but also that the relative jurisdiction of the competition authority and the regulator should be clear or, if not, that the authorities and the regulators should be able to cooperate. As with regulators, competition authorities should be able to exchange best practice across boundaries and to cooperate in cross-border investigations. Although recognition of the important role of competition law is increasing, only 14 out of 50 countries surveyed have properly functioning competition laws. COMESA and WAEMU have adopted systems of supra-national enforcement of the competition laws.

National laws

In Figure 44, granular information is provided about the competition laws that have been adopted in Africa and those African jurisdictions where there may be a competition law framework but not yet an operational authority.

Figure 44: Competition laws in Africa

	Year of enactment of current competition law (*)	Year of specific act/law creating the authority	Year when the authority started operations
Botswana	2009	2009	2011
Burkina Faso	1994, 2001	NA	1998
Burundi	2010	Law pending to be passed	Not functional yet
Cameroon	1998	1998	2008
Cote d'Ivoire[246]	1991	2003	Functional but with limited mandate
Ethiopia	2003 (initial), 2014 (current)	2010	2012
Gambia, The	2007	-	2009
Kenya	2010	2010	2011 (In its current form)
Malawi	1998	1998	2012
Mauritius	2007	2007	2009
Madagascar	2005	2014	Not functional yet
Mali	1992	1998	1999
Mozambique	2013	2014	Not functional yet
Namibia	2003	2003	2009
Rwanda	2012	2013	Not functional yet
Senegal	1994	1994	1996
Seychelles	2009	2009	2010
Swaziland	2008	2008 (Competition Law)	2008
South Africa	1998	1998	1999
Tanzania	2003	2003	2004
Togo	1999	1999	2006
Zambia	1994[2] and 2010[3]	1994[4] and 2010	1997

Source: WBG Antitrust Enforcement Database, Trade and Competition Unit – shading by the GSMA

246. The national Competition Commission in Côte d'Ivoire is an interesting example in this regard. Created in 1992 with the Law on Competition, the commission was operative until 2002. It was equipped with sufficient means and issued not less than 30 opinions. Due to a "socio-political crisis" its activity was "decelerated". See M. Bakhoum and J Molestinna, quoted, page 8
[2] Competition and Fair Trading Act
[3] Competition and Consumer Protection Act
[4] Competition and Fair Trading Act

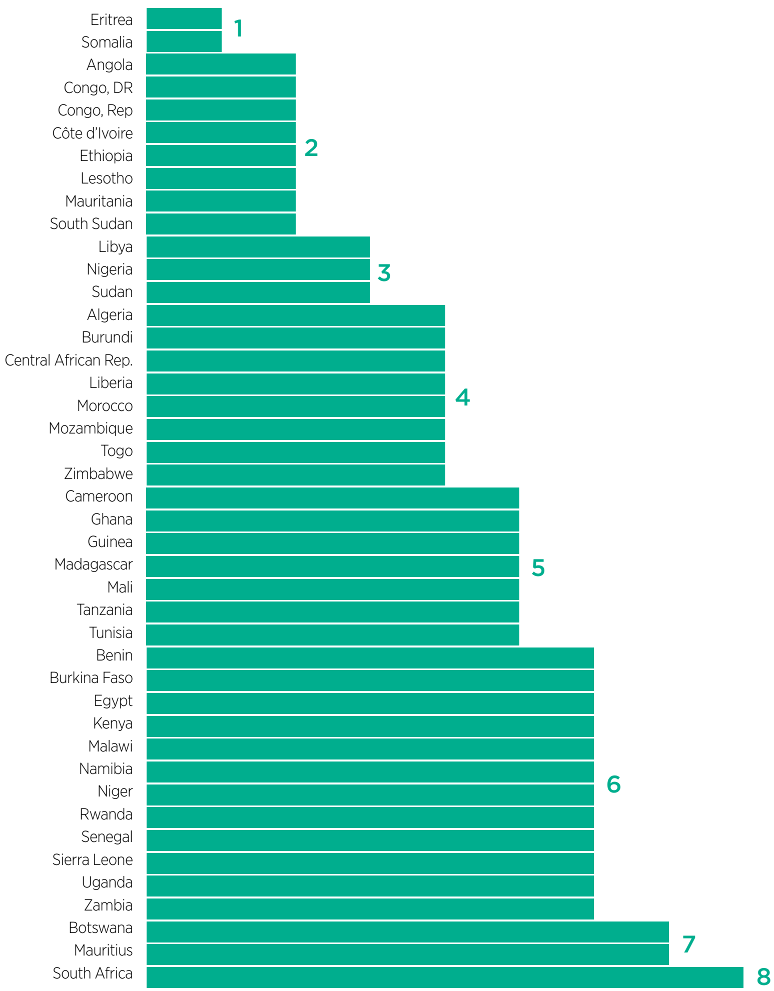
The GSMA has not independently verified whether in those countries where competition law has been adopted, the authority is sufficiently independent and has access to sufficient resources to perform its duties. The statistics provided in the WBG African Competition Policy Report,[247] based on answers by the competition authorities themselves, suggest that more could be done, but that the situation is improving across Africa.[248] In particular:

- In countries that have enacted competition laws, competition authorities have been operating for eight years, on average.
- On average, they employ 21 technical staff who work on competition, or approximately 32% of total staff (as compared to 68% in a sample of 35 established competition agencies around the world).
- Nine authorities have fewer than 10 technical staff handling competition matters.
- The average annual budget of these agencies has increased by 39 percent in four years, but resources remain limited. Excluding South Africa, the average annual budget is US$1.4 million.
- Seven authorities operate with an annual budget below US$0.5 million. The average annual budget allocation per technical staff in African authorities is one-third of that in a sample of 33 established competition authorities around the world.
- Despite these constraints, competition authorities complete, on average, 41 cases on merger control, 1.9 cases on abuse of dominance, 1.4 cases on horizontal agreements, 1.4 sector inquiries, and 6 advisory opinions on laws or regulations each year (but there is significant variation across authorities).

The above difficulties are shown in Figure 45, also provided in the WBG African Competition Policy Report.[249] By applying the Bertelsmann Stiftung's Transformation Index (BTI), [250] which is derived on the basis of expert assessments, the World Bank was able to determine that, on a scale of 1 to 10, only three countries have ratings above 6, namely **Botswana**, **Mauritius** and **South Africa**. Some of the countries listed do not have generally applicable competition law, so that the scoring is based on their frameworks across sectoral regulation, public procurement and competitive neutrality.

247. WBG African Competition Policy Report, quoted, page vii.
248. WBG African Competition Policy Report, Chapter B, *Towards a more effective competition policy framework*, pages 9-36
249. figure A-5, page 4
250. BTI 2016 *Codebook for Country Assessments,* http://www.bti-project.org/fileadmin/files/ BTI/Downloads/Zusaetzliche_Downloads/Codebook_BTI_2016.pdf (quoted in WBG Report, referred to as **"2016a"**, page 4, accessed April 8, 2016).

Figure 45: **Competition policy enforcement in Africa by country**: measured on a scale 1 to 10, where 10 denotes the existence of comprehensive competition laws strictly enforced.



Source: WBG African Competition Policy Report, Figure 5-A, (based on Bertelsmann Stiftung's Transformation Index)

Even with these limitations, it is clear that competition law has the potential to address the issues that arise. Because competition law can do so in a less distortionary way than regulation, arguably policymakers should consider directing resources towards enforcement of the competition rules. Because competition law applies across sectors, putting resources into competition law enforcement is likely to have important beneficial effects across the economy, as seen above (see Figure 5). Finally, because competition law applies across sectors, it can be used to address issues in the digital economy. As explained in the Competition Policy Handbook, the earlier cases against Microsoft were brought under the competition rules (see Competition Policy Handbook, Figures 50 and 51), and the ongoing cases against Google and Apple, in Europe, Asia and elsewhere, for example, are all competition law cases.

The cases in Figure 46 are also taken from the WBG African Competition Policy Report Report, Table C3-2.[251]

The GSMA does not express any views as to whether the outcome of the cases is justified. In order to reach a view, one would need to know the competitive situation in each market. The purpose of providing this table is to highlight that competition law truly has the potential to address issues of abuse of market power and anticompetitive agreements, meaning that more reliance should be put on a proper application of the rules of competition law. The cases identified are all in the telecommunications sector.

251. This table also includes details of a competition law case against the mobile operators in Egypt, outside the scope of this booklet.

Figure 46: Recent competition law cases in the telecoms sector in Sub-Saharan Africa

Country	Recent antitrust cases in the telecoms sector	Area of competition law
	Cases leading to sanctions	
Kenya 2013/14 [252]	Following a complaint from Airtel, alleging foreclosure from the 85,000 agents that Safaricom deals with for its mobile money transfer service, Safaricom agreed to: • grant access to their mobile money transfer network; • not to levy extra charges on competitors to use its network; • terminate exclusive agreements with agents. For the avoidance of doubt, the Competition Authority of Kenya did not issue a formal decision that Safaricom had abused its dominance or had committed any other infraction of the competition rules.	Abuse of dominance: no finding of abuse
Mauritius 2012 [253]	Mauritius Telecoms was found to have a monopoly in broadband, a 37 percent share in the market for the retail supply of pay-TV, and a 3 percent share in the market for the retail supply of premium content in pay-TV. Bundling broadband internet, international calling, and pay-TV products was found to be an instance of leveraging of market power, to gain share in the pay-TV market.	Abuse of dominance
Malawi 2013-2015 [254]	In May 2013, Airtel applied to the Commission for authorisation of its exclusive distribution arrangement for recharge vouchers and other products. This was approved subject to amendments. Airtel appealed at the High Court and objected to changes to its standard distribution agreements which meant that Airtel distributors should not be obliged to employ exclusive Airtel agents only. According to Airtel, the Commission could not reasonably expect Airtel distributors to appoint non-exclusive salesmen. The court ruled against Airtel. It found that Airtel was, through the clause in question, attempting to regulate the business affairs and conduct of its distributors, which are independent businesses, by leveraging its dominant market power.	Anticompetitive agreements

252. For a summary of the various stages in this case and the way in which a 'settlement' was finally reached, see the article http://blog.cipit.org/2016/01/26/recent-amendments-on-dominant-position-blur-line-between-competition-law-and-kenya-information-and-communications-act/, quoted above.
253. See: http://www.ccm.mu/English/Documents/News_2012/19.12.12_2.pdf
254. http://www.lexology.com/library/detail.aspx?g=6304a81c-f8da-49d1-a591-d41ce343da46

Figure 46 (continued): Recent competition law cases in the telecoms sector in Sub-Saharan Africa

Country	Recent antitrust cases in the telecoms sector	Area of competition law
Cases leading to sanctions		
South Africa 2012 [255]	During 2002 the South African VANS Association and other ISPs lodged a complaint alleging that Telkom had abused its dominance upstream to create an unfair advantage for its downstream retail division in the value-added network service (VANS) market. In 2004, the Commission referred the case to the Tribunal, having determined that Telkom had unlawfully sought to extend its monopoly rights by refusing to supply essential facilities (in the form of its fixed-line network) to independent VANS providers, inducing VANS providers' customers not to deal with them (by approaching them with claims of the illegality of the VANS model), charging their customers excessive prices for access services, and discriminating in favour of its own customers by giving them a discount on distance-related charges that it did not advance to customers of the independent VANS providers. After years of litigation, the Competition Tribunal imposed a penalty of R449 million on Telkom for abusing its dominance in the telecommunications market in 2012.	Abuse of dominance
South Africa 2013 [256]	Between 2005 and 2007, five separate complaints against Telkom were submitted by the Internet Service Providers' Association and three other ISPs. In its investigation, the CCSA found that Telkom had engaged in margin squeeze against ISPs by charging excessive prices for inputs; had refused to lease essential facilities; and had engaged in anticompetitive conditional selling of managed network services and internet access services by bundling these products with access services that were priced lower than the equivalent access services that end customers would purchase when considering the purchase of managed network services and internet access from other operators. Telkom and the CCSA agreed to settle the case and, as part of the settlement, Telkom admitted to contravention of the Competition Act in regard to margin squeeze and anticompetitive bundling and tying of products.	Abuse of dominance

255. http://www.mondaq.com/southafrica/x/200252/Antitrust+Competition/Competition+Breaking+News
256. https://www.scribd.com/document/147770310/Telkom-Media-Release-Final

Figure 46 (continued): Recent competition law cases in the telecoms sector in Sub-Saharan Africa

Country	Recent antitrust cases in the telecoms sector	Area of competition law
On-going investigations		
Mauritius	The Competition Commission opened an investigation on the potentially exclusionary and exploitative pricing conduct of two mobile telephony operators, Emtel and Orange. The major concern is that on-net/off-net price discrimination could be anticompetitive. Mobile termination rates are not regulated in Mauritius.	Abuse of dominance
South Africa	Cell C lodged a complaint with the CCSA against Vodacom and MTN, alleging anticompetitive on-net/off-net price discrimination on voice calls. According to Cell C, the alleged conduct discourages consumers from switching to smaller networks by creating a so-called 'club-effect.' The ongoing investigation is being run in parallel with the review of mobile termination rates carried out by the Independent Communications Authority of South Africa upon the complaint of Cell C.	Abuse of dominance

Intergovernmental organisations

Africa is seeing the emergence of regional competition rules enforced by supra-national organisations that require economic players to use a pan-African approach to assessing risks and compliance to competition law. The emergence of a pan-African competition regime for COMESA; the 2006 EAC Competition Act; the signing of the South African Development Community (SADC) Declaration on Regional Cooperation in Competition and Consumer Policies in 2009; the entry into force of WAEMU competition enforcement in 2003; the CEMAC Community Competition Law of 1999; and the Economic Community of West African States' (ECOWAS) Community Competition Policy of 2008 and Competition Act of 2009 are indicative of the inclination toward the enforcement of regional competition law frameworks.

In Sub-Saharan Africa supra-national enforcement of competition law by intergovernmental organisations is already a reality for COMESA and WAEMU (see Figure 47). The development of the regional and operational frameworks of these two organisations shows the need for the regional framework and the domestic regimes to operate in harmony and support each other in a way that prevents possible conflicts, whether in terms of actual outcomes of cases or at the level of policy formulation as well as avoids having one regime undermining the other.

The role of supra-national organizations is becoming increasingly important, especially in dealing with cross-border business activities.

Figure 47: Intergovernmental organisations and competition law in Sub-Saharan Africa

	Year of enactment of current competition law	Year of specific act/law creating the authority	Year when the authority started operations
CEMAC[257]	1999	2005	Not fully functional yet
COMESA	2004	2008	2013
EAC[258]	2006	NA	Not functional yet
ECOWAS[259]	2008	2009	Not functional yet
WAEMU	2002	2002	2003

Source: WBG Antitrust Enforcement Database, Trade and Competition Unit – shading by the GSMA

COMESA

The COMESA competition law regime came into operation in 2013. It consists of:

- supra-national merger control; and
- business conduct and consumer protection rules.

The system is enforced by the COMESA Competition Commission ("CCC"), based in Malawi.

To date, the CCC has not been very active in enforcing anticompetitive conduct, although in June 2016 it issued a notice asking firms to notify them of agreements (both historic and forward looking) that may be anti-competitive, for the purpose of having such agreements 'authorised' or 'exempted'.[260] This signals a new phase in antitrust enforcement in COMESA countries, as the CCC grows in confidence and experience, through its continued enforcement of the merger control rules.

257. CEMAC contains a 'community' competition law mechanism. The rules include a prohibition against cartels, against abuse of dominance and merger control rules. The rules are 'enforced' by a Competition Monitoring Body (CMB), which includes the Executive Secretariat and the Regional Competition Council. "Essentially, the CMB monitors the implementation of the rules within the domestic regimes of member states whereas the Council is the decision-making body; it decides on infringements and its decisions are subject to appeal to the Arbitration Court. […] the member states suffer from institutional weaknesses which directly impact on their capacity to implement the rules; indeed Cameroon is the only member state with a domestic competition law and authority in place." See Maher M Dabbah, quoted, pages 416-417
258. In February 2008, the EAC Competition Act was enacted. Section 37(1) of the Act established the EAC Competition Authority to enforce competition at a regional level; however, the authority is to only 'operate on an ad hoc basis' for a five-year initial and transitional period. Amongst other things, Part IX of the Act gives the Committee the competence to investigate and impose sanctions and remedies. Maher M Dabbah, quoted, page 425. When operational, the EAC will also include a system of mandatory merger control, similar to COMESA's (see WBG Report, page viii). Under the merger control rules, "the Council of Ministers may, upon appeal, approve a merger objected by the authority (WBG Report, page 13).
259. ECOWAS adopted a Community Competition Policy in 2007 and a Competition Act in 2008. See WBG report, quoted, page 34.
260. Michael-James Curry, *COMESA Competition Commission Expands Enforcement Ambit from Merger Control to Conduct*, African Antitrust, June 2016, https://africanantitrust.com/2016/06/22/growing-pains-from-one-trick-pony-to-full-fledged-enforcer/

In 2013-2014, over 50 mergers were notified to the CCC, and the CCC issued 'comfort letters' in other cases, exempting the parties from the need to file a notification.[261] The CCC recently announced[262] that it has received over US$3 million in merger filing fees since 2015.

The early history of merger control in COMESA countries and the subsequent steps taken to solve a number of issues are instructive. The history shows both the power of a competition authority to act in a pragmatic way when the rules are unclear, while waiting for the policymakers to amend the rules; and the difficulties with perceived sovereignty concerns on the part of member states. Specifically:

- **Merger filing requirements:** Originally, all mergers in which at least one of the parties operated in at least two COMESA Member States potentially had to be notified to the CCC, regardless of the value of the assets or turnover (revenue) of the companies involved. Recognising the difficulties that this requirement posed, pragmatically the CCC introduced the practice of issuing to requesting parties 'comfort letters', determining that the merger was not notifiable because it would not have an appreciable effect on trade between Member States or restrict competition in the region. In 2015, policymakers amended the rules. Mergers now have to be notified to the CCC when they meet certain thresholds.[263]
- **Fees for merger notifications:** Originally the parties that notified a transaction for COMESA's review had to pay a very high fee (a maximum of US$500,000) by any standard of merger enforcement, for the privilege. The maximum fee for merger notifications has been reduced to US$200,000.[264]
- **Mandatory nature of filings:** Parties must notify the CCC of any transactions within 30 days of the decision to merge (e.g., the signing a binding agreement or the announcement of a public bid). Any notifiable merger which has not been notified within the applicable deadline will be legally unenforceable in the COMESA region.
- **Penalties:** The CCC may impose penalties on the parties amounting to up to 10% of their revenues in the COMESA region (though so far the CCC has not imposed penalties).
- **Time limits:** The CCC must make a decision on a notified merger within 120 days after receiving the notification though extensions are possible.
- **Powers to block mergers or allow them with commitments:** the CCC has the power to block or allow mergers with commitments.

261. Gianni De Stefano, *Updated merger filing rules in COMESA*, Kluwer Competition Law Blog, 24 April 2015, http://kluwercompetitionlawblog.com/2015/04/24/updated-merger-filing-rules-in-comesa/
262. https://africanantitrust.files.wordpress.com/2016/10/wrap-3-19-october-2016-comesa.pdf
263. a filing is required if: (i) at least one of the parties operates in at least two COMESA Member States; and (ii) the higher of the combined revenues and the combined value of the assets of the parties in the COMESA region is US$ 50 million or more; and (iii) the higher of the revenues or the value of assets in the COMESA region of each of at least two parties are US$ 10 million or more (unless each of the parties achieves more than 2/3 of its revenues or assets in one and the same COMESA Member State).
264. The new merger filing fees are set at the lower of (i) US$ 200,000 and (ii) the higher of 0.1% of the parties' combined annual turnover or value of assets in the COMESA region.

- **One stop-shop?** One of the advantages of supra-national enforcement of merger control rules would be to provide for the merging parties a one-stop shop: if the merger meets the requirements, notification to COMESA should be sufficient, resolving the costs and complications of filings across multiple jurisdictions. However, this is not sufficiently clear: the CCC considers that it has exclusive jurisdiction for transactions which meet the thresholds but some national authorities, such as the Competition Authority of Kenya, have publicly stated that they consider that when local filing thresholds are met, a local filing is required, regardless of whether the transaction is also notified to the CCC. This effectively defies the purpose of supra-national enforcement, in that it increases the number of filings on the merging parties, rather than reducing transaction costs.

WAEMU (French UEMOA)

The WAEMU competition law came into force in 2003 and comprises the following elements:

- control of anticompetitive behaviour;
- rules and procedures relating to the control of cartels and abuse of dominant position;
- the control of state aid;
- transparency of the financial relationship between members states and public enterprises on the one hand, and between public enterprises and international or foreign organisations on the other; and
- cooperation between the WAEMU Commission and national authorities in the enforcement of the law.[265]

In addition, the WAEMU competition rules include a system of voluntary notification of mergers.[266] The WAEMU Commission has competence to apply the competition rules, subject to the control of the Court of Justice which has jurisdiction to rule on all decisions issued and fines imposed by the Commission.

The system of competition law enforcement is a centralised regime with the consequence that the national systems of enforcement should defer to the WAEMU system. The national authorities should monitor developments in their countries and defer to the WAEMU Commission. In practice, enforcement at the WAEMU level has been limited, leading to the criticism that the creation of WAEMU's competition laws has reduced the effectiveness of national competition enforcement (especially in **Senegal** and in the **Côte d'Ivoire** that used to have relatively established domestic competition law enforcement), while not leading to noticeably increased enforcement at the centralised level.[267]

265. Maher M. Dabbah, quoted, pages 421-422
266. WBG African Competition Policy Report, quoted, page 25.
267. See M. Bakhoum / J. Molestina, Institutional Coherence And Effectivity Of A Regional Competition Policy: The Case Of The West African Economic And Monetary Union (Waemu), Max Planck Institute for Intellectual Property and Competition Law, Research Paper No. 11-17, November 2011, http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1965508

Notwithstanding the limited record of enforcement, it is interesting that at least two cases investigated by the WAEMU competition authority were in the wider communication sector. As it has been reported:[268]

- "In the case of Sotelma-Malitel v. Orange Mali, Sotelma-Malitel felt excluded from a cost-free reciprocal roaming service between Senegal and Mali (unified network) that some mobile phone companies offered. Sotelma-Malitel argued that its exclusion from the service was based on its not being a member of the network. The Commission was called in on the grounds of an illicit agreement.
- The case of CANAL Overseas concerns the abuse of dominant position in the audiovisual sector. In this legal affair, CANAL Overseas, a French film production and distribution enterprise, refused to place its bouquet of television channels at the disposal of its distribution clients, MMDS, in the region. The Commission was approached following the refusal to supply."

The Need for Coordination and Cooperation

Where national frameworks include both a competition authority to enforce the competition rules and a regulator to make and enforce sector regulation in the telecommunications sector there is a need for the two to coordinate. Coordination and cooperation are desirable both at the national level and at the supra-national level:

- Between agencies at the **national level** (i.e., between the national competition authority and the regulator)
- Between agencies at the **international level** (i.e., between supra-national groupings of regulators and competition authorities, and between the groups that, in each intergovernmental organisation, deal with regulation and competition law)
- Between regulators at the **international level**
- Between competition authorities at the **international level**

268. See See M. Bakhoum / J. Molestina, quoted, page 13

At the national level

When there are two different agencies involved, there is a need for cooperation in each country between the telecommunications regulator and the competition authority. This issue is recognised throughout Sub-Saharan Africa. Although a statutory demarcation between the jurisdiction of the regulator and the competition authority is often lacking, the two agencies themselves in some cases have signed a Memorandum of Understanding (MoU). An MoU has been signed between the two agencies in **Kenya**,[269] in **Malawi**,[270] in **Mauritius**[271] and in **Namibia**.[272] In **Zambia**, the competition authority is represented on the boards of regulators. All sector regulators are required to consult the competition authority.[273]

When the jurisdiction of the competition authority and the telecoms regulator is not clear-cut and there is no MoU between the authorities, conflicts of jurisdiction may have to be solved by the courts. The agencies in **Botswana**,[274] **South Africa** and **Tanzania**[275] do not appear to have signed an MoU.

At the international level

If coordination between the agencies tasked with application of the competition rules and those tasked with application of sectoral regulation is desirable at the national level, it is also desirable at the supra-national level, within the various regional organisations that have a remit for the digital ecosystem. However, often these organisations tend to operate in silos. The silo approach extends to the way competition law and regulatory efforts are viewed, even within the same regional intergovernmental organisations.

Indeed, international cooperation is easier among regulators that meet at a supra-national level; and (separately) among competition authorities equally organised in supra-national groups. Whereas there are supra-national bodies that coordinate the activities of each type of agency, there does not seem to be much coordination between competition authorities and regulators at the supra-national level. Efforts have been made at the supra-national level to bring together different stakeholders (e.g., by EAC with the creation of EACO) and these fora may be a good starting point for exchanges of views on competition policy.

269. In Kenya, the regulator, the CA, has also a mandate in competition law, giving rise to jurisdictional issues. It must "develop, maintain, promote and enforce effective competition," with broad powers: it may investigate, on its own initiative, any licensee whom it has reason to believe has engaged in 'unfair competition'. See Maher M. Dabbah, quoted, page 385. On 6 May 2015 the Communications Authority and the Competition Authority signed an MoU. Source: http://www.ca.go.ke/index.php/what-we-do/94-news/295-ca-and-cak-sign-pact-on-competition-regulation
270. The competition authority, CFTC and the regulator, MACRS, signed an MoU in 2013, according to the CFTC Annual Report 2013: https://www.google.co.uk/url?sa=t&rct=j&q=&esrc=s&source=web&cd=2&ved=0ahUKEwilpPOqzcjOAhWDL8AKHfvFDvoQFggtMAE&url=http%3A%2F%2Fwww.cftc.mw%2Findex.php%2F2013-12-16-13-35-12%2Freports%2Fannual-reports%2F30-20122013-annual-report.html&usg=AFQjCNHuMF4PATbjdtAzRULEBDnIKsxTMg&sig2=O14tq_tdVM62NNGbC10zTA&cad=rja
271. The competition authority (CCM) and the regulator (ICTA) have an MoU. https://www.icta.mu/documents/laws/mou_ccm.pdf
272. The competition authority (NaCC) and the regulator (CRAN) have an MoU: http://www.nacc.com.na/technical_overview/memoranda_of_understanding.php
273. http://www.cci.gov.in/sites/default/files/presentation_document/autho_peter_20090213111014.pdf
274. Section 73 Competition Act mandates the Competition Authority to establish cooperation mechanisms with other sector regulators. MoUs have been signed with some authorities but not in the telecoms sector. MoUs have been signed with the Public Procurement and Asset Disposal Board (PPADB), the Directorate on Corruption and Economic Crime (DCEC), the Civil Aviation of Botswana (CAAB), the Non-Bank Financial Institutions Regulatory Authority (NBFIRA) and the Bank of Botswana. Source: http://www.competitionauthority.co.bw/faq-s
275. Although there is generally applicable competition law, the sector regulator has main jurisdiction to consider competition in the sector. The Competition Commission can report to the Minister instances where it believes that regulatory action would be in breach of Competition Act. See WBG African Competition Policy Report, quoted, page 31

At both regional and national levels, considerable work has been done in recent years to establish basic rules, institutions and procedures for competition law enforcement across Sub-Saharan African countries. The result, however, is a patchwork of national and regional laws and enforcement.

COMESA[276] and WAEMU have functioning competition laws and authorities, operating at the supra-national level, giving rise to a need to coordinate activity with the national competition authorities, as seen above.

In an effort to ensure coordination with the national competition authorities in the member states, COMESA for the first time signed an MOU in September 2015 with the competition authority of **Malawi**. On 5 June 2016, it was announced that COMESA has further concluded MoUs with the **Swaziland** Competition Commission and the Fair Trade Commission of the **Seychelles.**[277]

Swaziland, Seychelles and **Malawi** are also members of the Southern African Development Community (SADC). This does not have formal powers of enforcement of competition law, but on 7 May 2016, it was announced that nine members of SADC have also signed MoUs. These are **South Africa, Malawi, Botswana, Swaziland, Seychelles, Mozambique, Namibia, Tanzania** and **Zambia**. The SADC MoU was based on the 2009 SADC Declaration on Regional Cooperation and Consumer Policies and envisages information exchanges and cooperation in cross-border investigations among the authorities. As it has been remarked,[278] "it will be interesting to see, *first*, whether there may be conflicts that arise out of the divergent patchwork of cooperation MoUs, and *second*, to what extent the South African Competition Authorities, for example, could indirectly benefit from the broader cooperation among the various jurisdiction and regional authorities."

Cooperation between national regulators

The main regional organisations that group national telecommunications regulators in Sub-Saharan Africa are:

- **CRASA:** CRASA members are regulatory authorities from the following SADC Countries: Angola, Botswana, DRC, Lesotho, Malawi, Mauritius, Mozambique, Namibia, South Africa, Swaziland, Tanzania, Zambia and Zimbabwe. As seen above, CRASA (Communications Regulatory Authority of Southern Africa) is the modern embodiment of the original TRASA (Telecommunications Regulatory Association of Southern Africa), set up under the terms of the SADC Protocol on Transport, Communications and Meteorology in late 1997.
- **ARICEA:** The Association of Regulators for Information and Communications for Eastern and Southern Africa was set up under the auspices of COMESA, following the blueprint of TRASA (now CRASA) as set up by SADC.
- **WATRA:** The SADC blueprint was also followed by ECOWAS. WATRA, the West Africa Telecommunications Regulators Assembly was established in November 2004.[279] WATRA currently consists of 15 independent national regulatory authorities (NRAs), and departments

276. http://www.comesacompetition.org/?p=1020
277. *Michael-James Currie, Significant Strides made to Promote Harmonisation across African Competition Agencies*, **African Antitrust 7 June 2016,** https://africanantitrust.com/tag/mou/
278. By Andreas Stargard, quoted
279. According to the ITU

for regulation of telecommunications services established by governments of member states in the Economic Community of West African States (ECOWAS) sub-region and Mauritania. The Member States are: Benin, Burkina Faso, Cabo Verde, Côte d'Ivoire, Gambia, Ghana, Guinea Bissau, Liberia, Mali, Niger, Nigeria, Senegal, Sierra Leone, Togo and Mauritania, which is not a Member State of ECOWAS. The Guinea Bissau is a member of ECOWAS, but it does not appear to have an independent telecommunications regulator. WATRA's role in the region has traditionally been as a facilitator for information exchange between regulators, and to offer non-binding advice on procedural issues (such as dispute resolution). WATRA also makes substantive recommendations on policy matters (such as standardisation, interconnection and methods for estimating costs and setting prices). In April 2016, the organisation formalised an agreement to have its headquarters in Nigeria, as a precursor to WATRA "adopting a comprehensive framework for the regulation of telecommunications activities".[280] According to the sources available,[281] the members of WATRA, through ECOWAS, have retained the services of a consultant to consider roaming charges among the members.

Cooperation between competition authorities

A number of competition authorities from different jurisdictions have entered into MoUs for bilateral cooperation in tackling competition law investigations and enforcement. These include the authorities of **South Africa** and **Namibia,**[282] and of **Tanzania** and **Malawi**.[283]

South Africa is also a member of BRICS (which also includes Brazil, the Russian Federation, China, and India) and the BRICS countries entered into an MoU on cooperation in competition law matters in 2016.[284]

The African Competition Forum[285] is a network of competition authorities in Africa established in 2011 with the aim to promote the adoption of competition laws, help with capacity building of the authorities and assist in advocacy efforts for the implementation of competition reforms. It involves 41 out of 54 African countries.[286] It has already published a number of papers on concentrated sectors of the African economy (e.g., cement and poultry) that have posed challenges for national competition authorities. This facilitates the sharing of expertise by more established competition authorities, like those in South Africa and Namibia, who have intensively investigated complaints about cartels and abuses of dominance in those sectors of the African economy.

280. http://www.vanguardngr.com/2016/04/fg-telecommunication-regulators-sign-agreement-telecommunications-regulation/
281. http://extensia-ltd.com/ecowas-considering-abolition-roaming-charges-member-states/
282. https://africanantitrust.com/tag/mou/
283. http://allafrica.com/stories/201412150302.html
284. http://www.compcom.co.za/wp-content/uploads/2016/05/MoU-BRICS.pdf
285. Ibid WBG, page ii
286. Norton Rose Fullbright, *The Future of African Antitrust Enforcement,* at http://www.nortonrosefulbright.com/knowledge/publications/132127/the-future-of-african-antitrust-enforcement

As noted in the WBG African Competition Policy Report,[287] the ACF support "could be particularly useful" in:

- efficient merger control to reduce any undue administrative burden and refocus resources on transactions that are more likely to raise competition concerns, including adequate merger notification thresholds, two-phase procedures, transparent and clear guidelines on public interest considerations where mandated, and mechanisms for coordination between national and regional bodies; and
- effective anti-cartel enforcement to deter harmful practices through coordination and regional analysis of detected practices that might affect more than one country, rationalisation of the use of exemptions for anticompetitive practices, improvements in the fining system and maximum fine values, and adoption of policies to facilitate prioritization of case work and increase the efficiency of enforcement.

Merger control in the mobile sector

Nowhere is the need for coordination greater than in merger control cases in the mobile sector.

In Sub-Saharan Africa, where a competition law exists, in most countries it includes merger control carried out by the competition authority, although the independence of the competition authority is not guaranteed in all countries to the same extent.[288] There are good reasons why its independence should be assured. If the regulator has the task of applying (competition law) tools to mergers, there is a real risk of diverging outcomes:

> *"the culture and analytical approach required to regulate an industry differ from those typically characteristic of a competition law enforcement agency. There is also a risk that an industry regulator's views about the structure of a particular market could influence a merger decision."* Australian Harper Report.[289]

Nevertheless, some countries with no competition law have included sector-specific merger provisions in their telecommunications laws (e.g., in **Nigeria,** where only telecoms operators are subject to merger control scrutiny). The merger between MTN and Visafone in Nigeria is an example of the issues that can arise.[290] Areas for consideration include the need for a proper demarcation between the powers of the Securities and Exchange Commission and the powers of the NCC in the 'communication sector'. But an overarching consideration is that there cannot be a level playing field if only the operators in the telecoms sector are subject to competition laws and specifically merger control.

287. page xvi
288. For example, in Namibia, the Competition Act allows the minister of trade and industry to review commission decisions on mergers. See WBG African Competition Policy Report, quoted, page 13
289. Harper Report, http://competitionpolicyreview.gov.au/final-report/, referred to in more detail in the Asia Chapter, Figure 27.
290. The MTN/Visafone merger was approved by the Nigerian Communications Commission in December 2015. In February 2016 Etisalat, Nigeria's fourth largest operator by market share, filed an objection with the Federal High Court against MTN's intended use of Visafone's 800 MHz licence, arguing that the deal would entrench MTN as the dominant data service provider and stifle competition. At the time of writing (November 2016), the parties are engaged in litigation. *See* Ariori Babajide, "Federal High Court's ruling ends Etisalat vs MTN fight," Techislet, 29 Feb. 2016, *available at* http://www.techislet.com/federal-high-courts-ruling-ends-etisalat-vs-mtn-fight/

In the case of mergers in the mobile sectors, concentrations are often motivated (among others) by a wish on the part of the merging companies to acquire the spectrum held by the acquisition target. Spectrum assignment is however the prerogative of regulators and governments:

- On the one hand, the competition authority should consider the effects of the merger on the market as defined, to determine whether after the merger there will be a "substantial lessening of competition", as described in the Competition Policy Handbook.[291] The competition authority should consider, as part of this review, whether there could be barriers to entry post-merger. In conducting this analysis, the competition authority should consider all potential barriers, including spectrum scarcity; and
- On the other hand, regulators and governments are often nervous about spectrum assignment. They have the technical know-how to assess the consequences of a merger on spectrum availability, perhaps better than the competition authority.

There is therefore a need for cooperation between the competition authority and the regulator, to achieve a decision that would take into account all aspects capable of affecting the market. In cases throughout Sub-Saharan Africa, however, it is often the case that the competition authority and the regulator or the government conduct parallel investigations, leading to the possibility of divergent decisions, involvement of the courts and suboptimal results.

In **Tanzania**, the case of Tigo/Zantel resulted in approval by both the regulator and the competition authority, against the background of a crowded mobile communications sector and a set of very interventionist measures by the government.

Figure 48: Tanzania: Tigo/Zantel

Tanzania: Tigo-Zantel

- June 2015: Millicom (the parent company of Tigo) signs an agreement to purchase 85% of Zantel from Etisalat for $1, plus $74 million in debt and up to $32 million in net current liabilities. The Zanzibar government retains 15% stake.
- October 2015: The deal is approved by Tanzanian Communications Regulatory Authority and Fair Competition Commission with the condition that Millicom shall operate the two businesses in Tanzania (Tigo and Zantel) as separate businesses and at arm's length.
- The deal was attractive due to Zantel's spectrum holdings. Zantel had 850 MHz, 900 MHz, 1800 MHz and 2100 MHz spectrum for Zanzibar and mainland Tanzania.

291. Quoted. See in particular Assessing Market Power in the Digital Age, Key Concept 3, Mergers.

Not so, the intended acquisition of Neotel by Vodacom in South Africa. The confusion surrounding the jurisdiction of the regulator and the competition authority, and the difficulty with spectrum assignment, meant that Vodacom abandoned the intended merger.

Figure 49: South Africa: Vodacom/Neotel

South Africa: Vodacom-Neotel

- South Africa — May 2015: Vodacom agrees to buy Neotel for 7 billion rand ($676 million at the time), including a fixed fibre network and spectrum licences.
- Competition Commission: intends to attach conditions to the merger, including barring Vodacom from using Neotel's spectrum for more than two years.
- The companies announce a modified deal: Vodacom will acquire all of Neotel's assets related to its fixed line business, but not its spectrum licences.
- The High Court in Pretoria rules that Vodacom would not be able to take control of licences owned by Neotel as part of the merger.
- March 2016: The companies announce that, due to regulatory complexities and non-fulfilment of certain conditions, they will abandon their plans.

In Nigeria, the situation is further complicated by the fact that merger control does not apply to all sectors of the economy. The litigation between MTN and Etisalat further to the approval by the Nigerian Communications Commission of the merger between MTN and Visafone, mentioned above[292] shows the difficulties in the sector. While there is obviously no question of overlap between the jurisdictions of the competition authority and the telecoms regulator, nevertheless, it is unclear where the jurisdiction of the regulator ends and that of the Stock Exchange Commission begins.[293]

292. See footnote 290
293. The Communications Act 2003 grants exclusive authority to apply competition rules to the communication sector to the NCC but the Act does not define the boundaries of the 'communication sector'. The Investment and Securities Act 2007 establishes the Stock Exchange Commission, to oversee all mergers that meet certain revenue thresholds. No MoU appears to have been signed between the authorities. Nevertheless, the SEC seems to interpret its authority as largely procedural whereas the Nigerian Communications Commission appeared to be the ultimate regulator to deal with the merger which is now subject to litigation.

Spectrum Issues in Sub-Saharan Africa

Five issues will be considered.

First, spectrum harmonisation is an obvious area where supra-national organisations can make a difference.

Second, as seen above, and as the **Côte d'Ivoire** case (Figure 52) demonstrates, there is an obvious area of overlap between spectrum assignment and merger control. If too many mobile network operators are licensed, then the possibility of merging could offer a solution for those operators that find themselves struggling. However, it can be difficult for mobile operators to merge as the relevant law and the jurisdiction of different authorities are often unclear: merger control is an area where regulators and governments want to retain control over spectrum allocation, and the competition authorities are often required to approve mergers under merger control rules.

Third, as considered more particularly in Appendix 1, it is important that spectrum assignment takes place in a way that incentivises efficient use of the spectrum, through competitive selection methods. One such method is through the use of auction mechanisms, designed to maximise auction efficiency. Through an appropriate design of the rules, and an understanding of the competition implications of the assignment, auctions can deliver not only an efficient market-based pricing of a scarce resource (auction efficiency) and a non-distortionary public financing goal (public finance efficiency) but importantly, output efficiency. This means that a proper auction design can help with achieving the intended goals, from universal access through roll out of networks in rural areas, to increasing competition by new entry when the market assessment shows that there is a market failure to be addressed.

Throughout Sub-Saharan Africa the use of auctions has not been widespread. It would be important for regulators and governments to dispel any notion that an 'auction' would necessarily lead to spectrum assignment to the highest bidder. The WBG African Competition Policy Report[294] notes the following:

- In **South Africa**, attempts by the regulator ICASA to launch a spectrum auction for 4G spectrum are currently on hold.
- **Kenya**, **Mauritius**, **Namibia**, **Rwanda** and **Tanzania** allocate spectrum on a first-come, first served basis.
- In **Rwanda**, the government assigned the 4G spectrum to a joint venture with government participation and declared it to be the sole mobile broadband wholesaler. There may be good reasons for creating a monopoly at the wholesale level, but there are costs in terms of dynamic and allocative efficiency. **Nigeria** is the only country in Sub-Saharan Africa to have carried out spectrum auctions (although this statement from the report does not seem entirely correct, as at least in **Mozambique** auctions have taken place. Figure 50 considers the 2010 assignment of spectrum there).

294. Quoted, pages 106-107

Figure 50: Movitel new entrant in Mozambique[295]

In November 2010, Movitel (a unit of Viettel Group) was selected to become the third mobile operator in Mozambique, notwithstanding that another bidder had offered a higher price.[296] It received a total of 67.8 MHz of spectrum in 900 MHz, 1800 MHz and 2100 MHz bands to match the spectrum holdings of existing players. At the time, looking to raise more revenue, incumbent mCell agreed to share its existing cell towers with the new entrant. Movitel invested heavily in its infrastructure and at launch its network covered 105 of the 128 districts in the country, accounting for over 40% of the population. Its market share of connections is estimated to have increased from 5.9% at launch in Q2 2012 to 26.6% in Q3 2014, when its network was reported to cover around 80% of the population.

Fourth, and following from the above point, when assigning spectrum through the use of auction mechanisms, these should be designed to maximise auction efficiency. When the criteria are not properly thought through, or the reserve price is too high, the aims of the auction may not be met.

Fifth, if a country is considering the introduction of a new entrant, it should do so only after a proper market assessment to determine whether there is a need to affect the market structure in such a fundamental way, as with reserving spectrum for new entrants. The following example illustrates the issue in relation to **South Africa**.

Failure to conduct a proper market investigation when reserving spectrum for new entrants may also result in overcrowded mobile markets. For example, in **Tanzania**, a sixth mobile network operator, Smart Telecom,[297] entered the market in 2014 (prior to the merger between Tigo and Zantel), while Viettel launched as a further mobile operator in October 2015, under the brand name Halotel.[298]

Figure 51 considers the case of **Côte d'Ivoire,** where seven mobile operators were licensed, resulting in four not being able to compete, and the withdrawal of their licences. Further to this, in September 2016, the Government of Côte d'Ivoire decided to grant the fourth global telecoms licence to the Lybian Post, Telecommunications and Information Technology Company (LPTIC), the parent company of Green N, one of the mobile operators whose licence was withdrawn in April.[299] LPTIC said that they will invest US$154 million to upgrade their network and be able to compete in the Ivorian telecoms market but, in the absence of a clear understanding of the reasons why Green N and the other mobile operators could not compete previously, there is a real risk that the current plan may also lead to suboptimal results.

295. Ibid, page 9
296. https://www.telegeography.com/products/commsupdate/articles/2013/03/18/incm-to-offer-800mhz-frequencies-in-jun
297. Telegeography, *Smart Telecoms enters Crowded Tanzanian Mobile Market*, 14 April 2014: https://www.telegeography.com/products/commsupdate/articles/2014/04/14/smart-telecom-enters-crowded-tanzanian-mobile-market/
298. https://www.telegeography.com/products/commsupdate/articles/2015/10/15/viettel-launches-tanzanian-operations-under-halotel-brand/index.htm
299. it seems that there were some agreements on hiring old employees of Green N and also on taking on the liabilities of Green N: http://news.abidjan.net/h/599221.html

Figure 51: Côte d'Ivoire – seven operators; unsuccessful forced consolidation and licence withdrawal

Côte d'Ivoire : Unsuccessful Forced Consolidation led to License Withdrawals
Years: 2014-16
Authority: Autorité de Régulation des Télecommunications/TIC de Côte d'Ivoire (ARTCI)

Legislative and Regulatory Framework:

- Telecommunications and Information and Communication Technologies Ordinance, ordinance No. 2012-293 of March 21 2012. Generally establishing the authority of the ARTCI and regulations for the telecommunications sector, the postal sector and in data protection.

Chronology:

- May 2014. The Communications Minister recommends that the three smallest mobile operators merge. A fourth operator, Warid, was licensed but had not yet started operations.
- March 2015. The ICT Minister directed the four mobile operators Koz (Comium), GreenN, Café Mobile and Warid to merge within three months.
- June 2015. The ARTCI announced its intention to withdraw the operators' licences and to merge the firms into one company to be partnered with a new operator as a majority stakeholder.
- September 2015. ARTCI invited expressions of interest for a new licensee to compete alongside operators Orange, MTN and Moov.
- March 2016. After failed merger talks, ARTCI formally revoked the licences held by Comium, GreenN, Café Mobile and Warid, giving operators 30 days to deactivate their networks.
- April 2016. ARTCI announced its consideration of offers from Monaco Telecom, Vietnam's Viettel and the Libyan Post Telecommunications and Information Technology Company (LPTIC), parent of defunct GreenN, for licensing as the nation's fourth telecommunications service provider.

Background:

Facing seven mobile operators in the market, the Ministry of Communications began calling for consolidation in the mobile market in early 2014, proposing a merger of the three smallest operators, Comium, GreenN and Café Mobile, with a combined 4.2 percent market share, according to ARTCI. The move would be an attempt to create a viable competitor to dominant players MTN, Orange and Moov.[300] Following a surge in adoption driven initially by a number of market participants, spectrum allocations and other difficulties in the launch of and upkeep of services by smaller operators caused the government to set its sights on a more reasonable four-player market.

300. "Ministry urges three smaller players to unite to increase competition," TeleGeography, 27 May 2014, *available at* https://www.telegeography.com/products/commsupdate/articles/2014/05/27/ministry-urges-three-smaller-players-to-unite-to-increase-competition/.

Figure 51: Côte d'Ivoire – seven operators; unsuccessful forced consolidation and licence withdrawal

In March 2015, the ARTCI demanded that the three firms—as well as Warid Telecom's local operator, which acquired a licence in 2006 but failed to launch services—merge within three months in order to improve service coverage and quality and to ensure fulfilment of unpaid taxes and fees, reportedly amounting to $150 million.[301] Subsequently, in June 2015, the ARTCI announced its intention to withdraw the licences of the four smaller operators, asserting failure to pay taxes and fees and that they missed the deadline set by the government to merge. The government also announced its intention to force the merger of those companies and to seek a new majority stakeholder to take control.

Later in 2015, while these efforts to mould a fourth competitor out of the smaller operators were on-going, the ARTCI also began fielding expressions of interest for a new telecommunications service provider concession in an attempt to "revitalise the market."[302]

In March 2016, the ARTCI finally processed the revocation of the licenses of the four smaller operators, apparently abandoning any plans for their merger, despite assuring the defunct operators that "[t]hey would be privileged by the state with the guarantee to take back the former agents of these companies" should they manage to agree to a merger.[303]

The regulator assures that a decision is imminent and, at the time of publication, an announcement is expected soon.

Analysis

- Jurisdiction
  - The Telecommunications and Information and Communication Technologies Ordinance (the "Ordinance"), under Article 117, grants the ARTCI the authority to impose penalties, up to "final withdrawal of the license." The Ordinance provides the regulator with general directives such as that "to create a favourable environment for the diffusion and sustainable development of Telecommunications/ICT," per Article 70, and "to protect the interests of consumers, the operators and service providers by taking all the measures likely to guarantee the practice of an effective, honest and durable competition," per Article 72.
- Transparency
  - As evidenced by the confusion surrounding the nature of the June 2015 attempted reorganisation of the smaller operators, unclear information throughout the process seems to have left a great amount of uncertainty for consumers, although the four operators affected were consulted throughout the process.

301. "Cote d'Ivoire operators owe treasury USD 150 mln — Artci," Telecompaper, 27 April 2015, *available at* http://www.telecompaper.com/news/cote-divoire-operators-owe-treasury-usd-150-mln-artci--1079113.
302. "Cote d'Ivoire watchdog gauges interest in new telecoms licence," Telegeography, 17 Sept. 2015, *available at* https://www.telegeography.com/products/commsupdate/articles/2015/09/17/cote-divoire-watchdog-gauges-interest-in-new-telecoms-licence/.
303. "Press Release on Failing Operators Licenses Withdrawal," ARTCI, Press Release, *available at* http://www.artci.ci/images/stories/pdf-english/autre_documents/dossier_de_presse_retrait_licence_english.pdf.

Figure 51: Côte d'Ivoire – seven operators; unsuccessful forced consolidation and licence withdrawal

Areas for consideration:

- Seven mobile network operators, each with roll-out obligations and assigned spectrum, are likely to be too many. Yet, they were introduced. The subsequent history of four being forced to end operations should be a cautionary tale. Before issuing a new licence for a fourth operator now, the ARTCI should conduct a proper market assessment to understand if the market in Côte d'Ivoire can support four operators.

Appendix 1

Spectrum in Competition Policy

We are often asked about the optimal number of mobile network operators in one country, but there is no 'magic number'. In particular, it is not a foregone conclusion that four mobile network operators should exist in a market. Indeed, in some analysis it is suggested not only that there should be four operators, but also that one of them at least should be a 'disruptive force' or a 'maverick'. Regardless, each case must be considered on its own merit. Regulators and governments considering licensing a new mobile network operator must carry out a proper market assessment.

The case studies in this booklet bring into focus the relationship between spectrum assignment and competition law. Spectrum allocation determines market structures in the mobile sector and is therefore one of the main determinants of competition policy. Every time spectrum is set aside for a new entrant, the structure of the marketplace changes. Equally, if a merger of mobile network operators goes ahead, there will be fewer operators in that marketplace, with a change to the pre-existing allocation of spectrum. At the institutional level, nothing shows the fault lines between the competition authority and the national regulator, and, in the case of supra-national enforcement of the competition rules, the national and the supra-national authorities, as allocation of spectrum.[304]

When a market has reached what a government or a regulator (the authority with the ability to assign spectrum) considers a satisfactory balance of spectrum between the existing mobile network operators, changing this balance (by a merger, or by secondary trading) may give rise to difficulties. Operators may well seek to merge to counter a fragmented spectrum assignment, especially in the absence of secondary trading. Indeed, two of the case studies discussed (Indonesia, Case 33, and Côte d'Ivoire, Case 51) show how, after the spectrum allocation process led to too many operators (seven in the case of Indonesia), the government itself sought to engender mergers between mobile operators. Fewer operators in a country may generate greater scale, prompt fiercer competition, and ensure investment and innovation.

In this appendix, the following will be discussed. First, can there can be said to be a 'magic number' of mobile network operators for thriving competition in any one country? Second, quite apart from the number of mobile operators, should one of them also be a 'maverick'? Third, it follows that there is a need, when deciding on spectrum assignment and specifically whether to set aside spectrum or to grant special regulatory treatment to a new entrant, to ensure that this decision is backed by a market analysis, to ensure that the marketplace will support that number of operators.

304. For example, the failed attempt by Hutchison in the UK to merge with O2 Telefonica, ultimately blocked by the competition authority with jurisdiction, the European Commission, was accompanied by public statements by the CEO of the national regulator, Ofcom, who took to the popular press to voice her opinion that the merger would lead to a substantial lessening of competition (see the interview with the Daily Mail: http://www.dailymail.co.uk/news/article-3381629/Older-mobile-phone-users-face-bills-hike-telecoms-firms-allowed-merge-watchdog-boss-warns.html. See also the article in the Financial Times: http://www.ft.com/intl/cms/s/0/be8d03c8-c67b-11e5-808f-8231cd71622e.html#axzz3yq6DXw6p). Ofcom specifically reserved spectrum for a 4th operator in the 2013 4G auction: http://media.ofcom.org.uk/news/2012/ofcom-unveils-plans-for-4g-auction-of-the-airwaves/

There is no 'magic number'

The European Commissioner Margrethe Vestager has been quoted as saying that no, the competition law authority within the European Commission, DG COMP, does not consider that four is the 'magic number' of mobile operators per country.[305] Indeed, she is right.

The magic number that everybody is concerned about is 'four'. Does every country require four mobile operators? Specifically, can 4-to-3 mergers be allowed? There is no simple answer. Every country is different and every case needs to be considered on its own merits. Within the EU, 19 countries have three mobile operators that account for more than 95 per cent of connections[306], while the remaining 9 countries are four-player markets.

It is possible that in a country with four mobile operators, one or two would find it difficult to compete, for example. In this situation, a merger between the two smaller operators could lead to fiercer competition between three operators, possibly leading to more vibrant competition than a status quo of two strong competitors and two struggling operators. Much has been discussed and many papers have been written to try and determine whether, post-merger, a country with three

Figure 52: Recent research on the effects of mergers and market concentration

Research paper	Investment effects	Price effects
CERRE (2015)	Yes	Yes
Csorba & Pápai (2013)	No	Yes
DG Comp (2015)	No	Yes
Frontier (2015)	Yes	Yes
Houngbonon (2015)	No	Yes
Houngbonon & Jeanjean (2016a)	Yes	No
Houngbonon & Jeanjean (2016b)	Yes	No
HSBC (2015)	Yes	Yes
Jeanjean (2015)	No	Yes

305. Margrethe Vestager, *Competition in telecoms markets*, speech at 42nd Fordham University conference, at: https://ec.europa.eu/commission/2014-2019/vestager/announcements/competition-telecom-markets_en
306. Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Estonia, Finland, Germany, Greece, Hungary, Ireland, Lithuania, Luxembourg, Malta, Netherlands, Portugal, Slovakia, Slovenia,
307. CERRE, 2015. *Evaluating market consolidation in mobile communications*; authored by Genakos C., Valletti T. & Verboven F., at http://cerre.eu/sites/cerre/files/150915_CERRE_Mobile_Consolidation_Report_Final.pdf; Csorba, G. & Pápai Z., 2013, *Does one more or less mobile operator affect prices? A comprehensive ex-post evaluation of entries and mergers in European mobile telecommunications markets*. 24th European Regional Conference of the International Telecommunications Society, at: http://hdl.handle.net/10419/88503; DG Comp, 2015, *Ex-post analysis of two mergers: T-Mobile/tele.ring in Austria and T-Mobile/Orange in the Netherlands*, by Aguzzoni L., et al., http://ec.europa.eu/competition/publications/reports/kd0215836enn.pdf; Frontier, 2015, *Assessing the case for in-country mobile consolidation,* for GSMA, at http://www.gsma.com/publicpolicy/wp-content/uploads/2015/02/Assessing-the-case-for-in-country-mobile-consolidation-report.pdf; Hogunbonon, G.V., 2015. *The impact of competition on the price of wireless communications services*; at http://ssrn.com/abstract=2600476; Houngbonon, G.V. & Jeanjean, F., 2016 a, *What level of competition intensity maximises investment in the wireless industry?.* Telecommunications Policy, vol. 40, issue 8, athttp://www.sciencedirect.com/science/article/pii/S0308596116300271;; Houngbonon G.V. & Jeanjean, F., 2016, *Optimal market structure in the wireless industry,* at http://ssrn.com/abstract=2668649; HSBC, 2015, *Supersonic: European telecoms mergers will boost capex, driving prices lower and speeds higher,* at http://www.orange.com/fr/content/download/33263/1086075/version/2/file/Supersonic+13.04.15.pdf; Jeanjean, F., 2015, *What causes the megabyte price drop in the mobile industry?* Journal of Industrial and Business Economics, vol. 42, issue 3, at http://link.springer.com/article/10.1007%2Fs40812-015-0013-6.

remaining mobile operators experiences more, or less intense competition. The main papers are listed in the footnote[307] and the readers can make up their mind. The following table (Figure 52) provides an overview of the papers and the two main matrices considered, namely the effects on investment, and the effects on price.

In the EU, three 4-to-3 mergers have been cleared with commitments in recent times, in Austria, Germany and Ireland. As more data become available as to the implications of those European mergers on pricing, and on quality of network coverage and speed of download, it should be possible to reach firmer conclusions but, for the present we can say the following.

When considering the impact of mergers or market structure on prices, the measurement chosen to assess prices will determine the conclusions reached on whether the mergers have led to price increases. There are broadly three ways in which prices can be measured:

- Revenue per unit (e.g., ARPU or ARPM): this tends to be easier to calculate but it is affected by both prices and usage. It also does not measure prices that are actually paid by consumers.
- Basket approach: this involves defining baskets that are representative of consumer usage and calculating the cost of consumption. This can give a better indication of what consumers actually pay but the prices that are estimated are sensitive to basket composition. In some studies, baskets have overestimated price by over-representing voice and SMS and underrepresenting data usage.
- Unit price: this involves estimating the unit price for voice, SMS and data that is paid by the consumer. Due to the manner in which mobile services are bundled together, this approach is difficult to implement analytically.

It is important that any analysis of pricing carefully consider the method of measurement and that any conclusions take into account potential limitations.

It is also necessary to take into account any improvements to quality of service (e.g., network coverage, download speeds etc.). On this aspect, it is instructive to consider the two reports issued in 2016 by the Austrian regulator and the Austrian competition authority, to see how the same facts can lead to different conclusions, and to see how still, regulators and competition authority seem to maintain a very narrow focus on the price of services after the merger (see Case 53 below).

In conclusion, there is therefore no magic number and no shortcut to a proper market analysis. For the purposes of this Appendix, it suffices to note that three of the most competitive markets in the world, namely South Korea, Japan and Australia, only have three mobile operators.

Figure 53: Recent research on the effects of mergers and market concentration

Austria: what happened there?
Year: 2016, 14 March
Authority: Austrian regulator: RTR (2016); Austrian Competition Authority: BWB (2016)

Documents:

- Ex post analysis of the merger between H3G Austria and Orange Austria; report by the regulator, RTR.
- The Austrian Market for Mobile Telecommunications Services to Private Customers, report by the competition authority, BWB, following a sectoral inquiry.

Chronology:

- November 2012 - H3G sold Orange's brand 'Yesss!' to the incumbent operator A1 Telekom Austria (TA); the transaction was cleared by the Austrian Cartel Court without commitments.
- December 2012 - the European Commission clears the acquisition of Orange Austria (Orange) by Hutchinson 3G Austria (H3G), subject to commitments.
- 14 March 2016 - the competition authority, BWB and the NRA, RTR, publish a report on the merger effects of the merger on the same day.

Background:

The merger between H3G Austria and Orange Austria and the related merger between Telekom Austria and Yesss! drew criticisms by both the RTR and the BWB. Both authorities expressed concerns about the effects of the merger on prices of mobile communications, going forward.

Both authorities concluded that the prices of consumption baskets across different market segments have increased following consolidation.

- RTR (2016) finds price increases from 22% to 90% for traditional and smartphone users, respectively;
- BWB (2016) finds increases of 14 to 30% depending on the type of tariff (pre- and post-paid; SIM or contract-only).

Figure 53: Recent research on the effects of mergers and market concentration

Analysis:

- Price Metrics
    - The service mix in each basket considered in the RTR report is based on consumption patterns before 2013;
    - The proportion SMS:voice:data per basket is kept constant over time: it is likely to underestimates the weight of data consumption; and
    - RTR considers a single price measure for each country, using a single basket, averaged across operators. This approach is likely to understate consumer choice of tariffs and will not reflect the actual prices paid by a large number of consumers, which will vary considerably depending on preferences.
- Effectiveness of remedies not taken into account

Both studies analyse pricing until the end of 2014, which is before the MVNO remedy became effective. BWB refers to the fact that prices as measured are in fact decreasing following the implementation of the remedies, and in particular the introduction of MVNOs. "*In 2015 (not pictured) several mobile virtual network operators (MVNOs) entered the market, and according to the price index by the telecoms regulator RTR, prices started to decrease again.*"

Areas for consideration:

- The choice of metrics and baskets is key to this type of analysis. Houngbonon (2015) and HSBC (2015) find that the price per bundled megabyte in Austria has fallen as a consequence of H3G/Orange, whereas the price per minute of voice has increased (Houngbonon: 19% price decrease in the unit of bundled data; HSBC: estimates -0.83 USD cents per megabyte).
- If a merger is cleared subject to commitments, the authorities have considered that the commitments can address the issues identified. It is important therefore to take into account the impact of the remedies imposed when assessing the effects of a merger in a country.
- What happened to investment and quality of service in Austria? Since the merger took place, the merged entity has rolled out an LTE network which Hutchison predicted would be one of the by-products of this merger. Again, neither the competition authority, BWB, nor the regulator, RTR, have considered this aspect in their reports.

The role of the 'maverick'

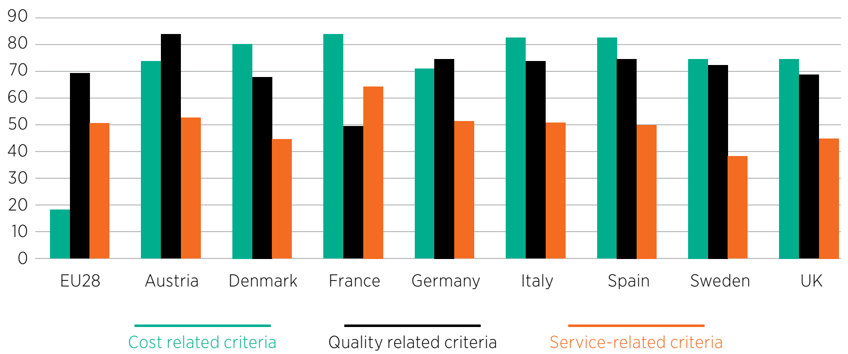
It is sometimes said that it is not only the number of operators that is relevant but also the fact that at least one of them should be a disruptive force,[308] usually have lower prices for mobile telephony services than countries where this is not the case. This is an uncontroversial finding: if the intended result is to achieve lower prices, it is not just the number of operators that matters, but also the fact that one of them at least should be a maverick, or a disruptive force. There are a number of points to make concerning these conclusions.

First, it appears the regulators and competition authorities continue to focus almost exclusively on *the price* of mobile services. Indeed, Ofcom states: "*we do not test for the impact of disruptive firms (or the number of firms) on investment incentives but we do appreciate that the sustainability of disruptive strategies must also be considered*".[309] At the GSMA, we believe that a narrow focus on price, without a proper assessment of sustainability, potentially leads to the wrong regulatory results.

Second, although price is a very important consideration, consumers need value for money. Research by the GSMA shows that quality, in the form of speed of downloads and roll out coverage, are also important factor for consumers. If the disruptive strategy leads to lower prices and lower investment, or is not otherwise '*sustainable*', this could be an issue.

Survey evidence produced by the European Commission illustrates the importance of quality to consumers. Figure 54 below shows that for Austrian and German consumers, quality-related factors are already more important than price-related factors. Furthermore, network quality will become even more important in the future.[310]

Figure 54: Consumer outcomes — what do consumers care about?



Source: E-Communications and the Digital Single Market (May 2016).
Consumers were asked "When subscribing to an internet connection what are the main factors you consider? Firstly? And then? (Maximum 4 answers)". Numbers represent the % of respondents that mentioned criteria related to cost, quality and service

308. At the height of the debate in the UK concerning the intended merger between Hutchison and Telefonica O2, Ofcom published a paper in which the UK regulator considered this point and reached this conclusion. In competition law parlance, Ofcom's disruptive force is often referred to as a "maverick", i.e., usually a smaller operator that enters the market and seeks to increase its market share by offering very competitive deals http://stakeholders.ofcom.org.uk/binaries/research/cross-media/disruptive-firms-econometrics/research_document.pdf
309. Ibid, page 2
310. European Commission, 'Full synopsis report of the public consultation on the needs for internet speed and quality beyond 2020'. https://ec.europa.eu/digital-single-market/en/news/full-synopsis-report-public-consultation-needs-internet-speed-and-quality-beyond-2020

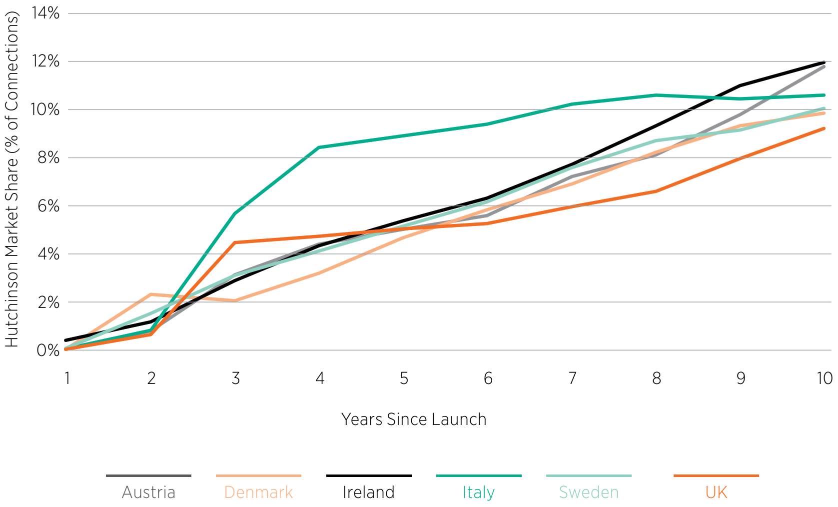
Third, if the analysis of disruptive pricing should take into account sustainability, it should perhaps consider whether prices may increase relative to a low, perhaps *unsustainable* starting point. This may have been the case in Austria (see Figure 53). Furthermore, price increases may be necessary to enhance investment and innovation. Regulators and competition authorities generally stress the importance of a framework that promotes investment, which is welcome, but this means that non-price factors also need to be given equal weighting and considering when assessing competition in the market. Furthermore, when a competition authority looks at mergers, an increase in price is often presumed whereas the merging operators are required to prove that the savings and revenue increase that they hope from the merger will materialise and be reinvested within a short time scale and to prove that there are no less disruptive means to achieve the intended result. This means that, in practice, price ends up being the main focus. This is explained in the Competition Policy Handbook.[311]

Fourth, as Ofcom acknowledges,[312] the conclusions hold if the maverick can continue to be a maverick indefinitely. In fact, this cannot be. The reason why the new entrant or the smaller operator offers very competitive deals is because it seeks to scale up, in order to be able to compete. If this does not happen, then the maverick at some point will have either to exit the market, or to seek to scale up by merging with a competitor. Although regulators, "*are keen to protect disruption to retain the consumer benefits associated with [market disruption]*",[313] no amount of regulatory intervention can achieve this. After a regulators or a competition authority have blocked a merger, that does not of course guarantee that this regulatory intervention will in any way "*protect disruption*".

Finally, research by the GSMA (Figure 55) shows that after 10 years since entry, Hutchison had achieved on average a 10% market share in the countries listed. Seen in this light, it may not be a coincidence if Hutchison is seeking to scale up by merging, in Europe. In other words, at some point the fundamental scale economies dominate, making the maverick strategy unsustainable. Then regulatory intervention to block efforts by the maverick to scale up can be counterproductive.

311. Quoted. See the contribution from Telecoms Italia, *Mobile to Mobile Mergers in the EU – Analysis.*
312. "disruption is generally motivated by a drive to increase market share to compete more effectively in a market," *ibid*, page 4
313. Ibid, page 3

Figure 55: The maverick will not be a maverick forever



More operators does not mean more competition

How did Indonesia end up with seven (nine including the BWA licensees) mobile operators? (see Case study in Figure 33). What happened in Côte d'Ivoire? (see Case study in Figure 51). History does not record but there are many reasons why governments or regulators may seek to license increasing numbers of mobile operators. Seeking to maximise revenue from auction is an obvious reason to increase the number of licences granted but in a number of cases the reasons are more nuanced. Spectrum allocation is often seen by regulators as a way to facilitate the entry of new players in a market, with a view to stimulate competition. However, GSMA research demonstrates that the majority of new entrants that launched services since early 2010 did not impact the competitive structure of their respective markets, in turn showing that the success and lifespan of new entrants depends on a number of factors that are not always properly considered in the regulatory process, and should be.

The need for a market assessment before spectrum allocation

The Competition Policy Handbook includes details of the way in which a proper exercise in market definition and market assessment should be carried out for the purposes of competition law and SMP regulation. In this Case Study booklet, more details are provided about the practical application of a proper SMP analysis, and in Appendix 2 below there are flowcharts illustrating the process in diagrammatical form.

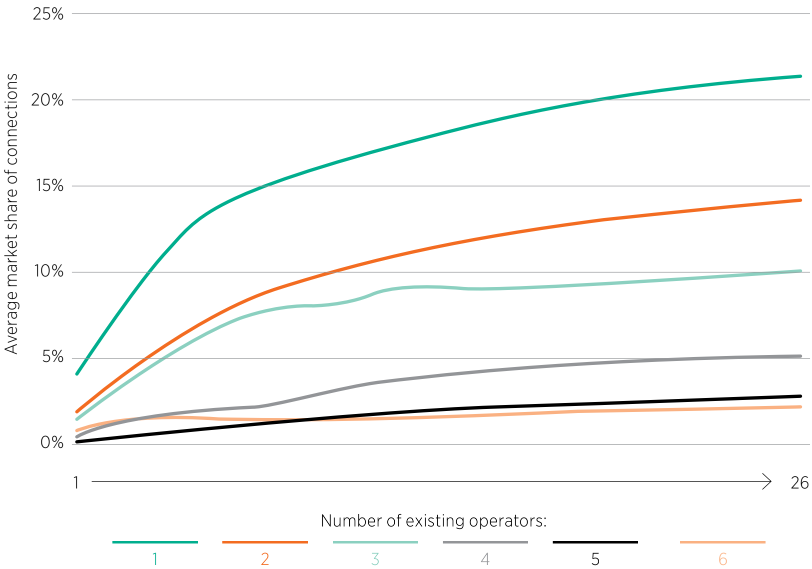
A similar process should be undertaken when considering whether to go to special lengths to facilitate entry by a new mobile operator. The regulator or the government should be clear about the reasons to license a new licensee. This is similar to identifying the market failure or consumer harm that regulatory remedies are designed to address, in regulation.

First, there should be a market and competition assessment. How many competitors are already in that market? Is the market working well for consumers? How is the market expected to develop?[314] What is the market failure that the introduction of a new operator will address? It is also important to consider the potential trade-offs between different types of economic efficiency. Due to the substantial amount of fixed costs involved in building and maintaining radio access networks (RANs), overall costs will be lower with a smaller number of RANs. On the other hand, if fewer operators result in a reduction in end-to-end network competition then this is less likely to be efficient in allocative and dynamic terms. Regulators should therefore assess the impact on each of these when considering the merits of promoting the entry of an additional operator and engage the stakeholders in a dialogue before acting. As this is a complex task that involves judgment calls, best practice is to engage with stakeholders as part of a transparent public consultation.

Second, if the market failure identified is for example failure to roll out a network in rural areas, it would be important to understand the reasons why this is so. There are many factors that contribute to the successful roll out of a network. As shown in Figure 56, the number of existing players in the marketplace at the time of launch of a greenfield operator is a significant indicator of its ability to grow market share.

314. Compared to a typical market review, a competition assessment for spectrum allocation may need to consider a longer time period because the award is will shape the competitive structure of the mobile sector for many years.

Figure 56: Number of existing operators at the time of launch is a determinant of success



Source: GSMA Intelligence

Further, the GSMA has identified the following important factors,[315] alongside availability of spectrum:

- the ability to invest in network deployments in order to rapidly reach nationwide network coverage;
- the facilitation of access to public building and the removal of other obstacles to support network deployments;
- incentives for infrastructure sharing; and
- the financial backing to sustain marketing campaigns.

Infrastructure costs and the legal regime are critically important to network deployment.

In light of the infrastructure costs, would a new entrant have access to investors' money? Would investors consider the specific market? The legal regime must be conducive to competition among the intended number of operators. This includes not only a predictable and sound regulatory regime, but also a system allowing for access to sites for network deployment, for example.

If the competition assessment suggests that the mobile market is currently not working well for consumers, for example if prices are too high and/or if quality of service is poor, then once again the regulator should assess the evidence to understand why this is the case and consider the merits of each policy option

315. Ibid., page 3

that could remedy the problem identified. Setting aside spectrum for an operator could be one option but there are also likely to be others, for example around network access (for MVNOs) or quality of service obligations. If high prices are primarily driven by consumer inertia and a lack of engagement when choosing a mobile service (which may result in consumers not choosing optimal tariffs) then a more targeted and proportionate remedy could involve improving consumers' access to information and making it easier to switch operator.

If availability of spectrum is a crucial factor, it is important to consider whether the spectrum to be made available will be (i) sufficient; and (ii) the 'right spectrum', achieving the right balance between lower and higher bands. Each new technology generation uses wider channel bandwidth, as well as improved spectrum efficiency to drive faster connection speeds. This means that they use increasing amounts of spectrum, making the need for new mobile frequency bands essential. For example, a 2G channel is 0.2 MHz wide, a 3G channel is 5 MHz wide and a 4G-LTE channel can range from 1.4 MHz to 20 MHz wide — the fastest 4G-LTE services are only possible with the wider channel sizes. The most recent types of 3G and 4G-LTE networks are capable of providing users with especially fast speeds by combining several channels together, making them even more reliant on large amounts of spectrum. It is also important to take into account that mobile operators in a given market will often focus on a particular set of services or customer segment - for example focusing on the delivery of a very high-quality service (e.g., high download speeds and latencies) at higher prices in more urban areas. Another operator may target consumers that prioritise budget over quality. Such differentiation is a common feature of competitive markets and should not be discouraged, either deliberately or unknowingly (for example by trying to ensure that operators have similar amounts of spectrum overall or that each operator should have spectrum in every band).

Third, having identified the market and the issue (the 'market failure') if a government or regulator decides to encourage a new entrant into the market, there needs to be a decision about how this is to be achieved, about the remedy to be imposed.

Auction design

An efficient way to ensure that spectrum is assigned with proper consideration of the implications for competition is through careful design of auction rules. In some countries, it is as if the term 'auction' has become confused with a method of assignment that implies granting spectrum to the highest bidder, without proper consideration of the other goals of spectrum assignment. Our analysis shows that this may be the case especially in countries across Africa. This is not the case. Figure 57 highlights three main types of efficiency that should be sought through the design of the assignment mechanism. The most important from an economics perspective is output efficiency: spectrum is assigned to maximise the intended output. This can range from roll out to rural areas; to ensuring that the operator is best placed to make use of the scarce resource. However, auction efficiency is an important consideration to ensure that the cost of spectrum reflects a fair market price, and there is an aspect of public financing efficiency that should not be ignored (but controlled). Auctions do raise public funds but it is important that this aspects does not become the driver in the auction design. Public financing efficiency should be carefully considered to ensure that the least distortionary method is used for raising funds.

Figure 57: Efficiency in auctions

OUTPUT EFFICIENCY	Spectrum is allocated to maximise the incremental gain in allocative, productive and dynamic efficiency in output markets
AUCTION EFFICIENCY	Market-based spectrum pricing Other things being equal, spectrum is acquired by bidders that give it the highest valuation
PUBLIC FINANCING EFFICIENCY	To raise public funds, use the least distortionary method

Different models are employed to ensure both access to spectrum as well as facilitation of entry conditions, but each have trade-offs. Examples include:

- the use of spectrum caps
- set-asides of spectrum for the new entrant
- different network deployment and coverage requirements for the new entrant
- obligations imposed on incumbents or established operators to provide facilities sharing (such as access to infrastructure) and national roaming at regulated prices
- facilitation to access public buildings for site and cell towers allocation.

In Figure 58 below, an example is given of two mirror image potential market failures that can occur at the time of a spectrum auction (the larger operators obtain too much spectrum/ the smaller operators do not have enough spectrum) with the possible remedies and the regulatory risks associated with these.

Figure 58: Possible remedies and regulatory risks associated with them

Market failure	Possible remedy	Regulatory risk
Significant market power - larger operators may obtain the majority of spectrum.	Spectrum caps.	Setting appropriately sized caps is difficult. Setting caps too low could distort the market. The larger operators may be both the highest-value users and the users with the best incentive to maximise use.
	Obligations relating to coverage or network sharing.	If obligations have a material impact on operators' returns, this could affect incentives to invest.
Smaller operators do not have enough spectrum to be credible.	Spectrum set-aside. Spectrum floors.	Setting spectrum reserves is difficult. Reserving too much spectrum could distort the market. The smaller operators may not be the highest value bidders and may be unable to maximise spectrum use. Could choose the wrong spectrum to reserve. Set aside could be restrictive if different types of smaller operators have different spectrum requirements.
	Bidder credits	Setting the credit at the correct amount requires detailed data. If it's too low, smaller operators or new entrants may not obtain any spectrum. If it's too high, then the outcome is effectively pre-determined.

Only after the analysis, and only if the market failure to be addressed is capable of being dealt with by spectrum allocation, having considered all factors, should special measures be employed to license a new operator. Failure to do so can have negative consequences for the market, for the new entrants in question and for the regulator itself, leading to waste of time and resources, and possibly also reputational damage.

Appendix 2

SMP Regulation in Practice

In this Appendix 2 we provide two examples of SMP regulation, illustrated by flowcharts. The first example is historical, showing a process of market definition and market assessment that leads eventually to regulation. This is provided for illustration only, and the example chosen reflects the way in which in Europe regulation of access to fixed telecoms networks has been imposed historically. As SMP regulation started in Europe, European countries have the most experience of conducting SMP analyses. As in Europe the telecommunications market is usually characterised by the near ubiquitous presence of a fixed operator, wholesale regulation of the fixed operator is a common occurrence. This would not apply in the African or the Asia context analysed, where typically fixed provision of telecommunications is not so advanced.

The second example is a prospective one, and considers a situation where at the retail level consumers have access to substitute products via use of data and where there is sufficient switching to make the products interchangeable. In that case, there may be no need to regulate (and certainly no need to regulate at the retail level) because the telecoms operators cannot increase the price of a call, or the price of call termination, if consumers can simply switch to a free product. In this case, even though evidence of switching may not be readily available, nevertheless the mere possibility that switching may occur would act as a deterrent against price increases by the regulated operator(s). This is so even though the two functionally equivalent products are provided over different technologies.

The 'Overview' flowchart identifies the steps to be followed for an SMP review. Starting from the retail level, the regulator should identify the products that belong to the same market and the geographic reach of the market. If, by applying the three criteria test, it appears that the market is not effectively competitive, the closest wholesale market should be identified and the analysis carried out at the wholesale level. Only if the wholesale market is not effectively competitive, then an SMP review should be carried out and remedies imposed. The cases reviewed in this booklet show that advanced economies tend to impose regulation at the wholesale level. The European journey towards wholesale regulation is chartered in Figure 59.

The reason why regulation (if necessary) should be imposed at the wholesale level rather than at the retail level is that, as seen above (Figure 12), retail regulation has the potential to foreclose innovation. If, in the hypothesis, all operators in a market are obliged by regulation impose at the retail level to comply with the same KPIs and to price their services at the same price, then the normal flow of competition is affected, and the markets do not function properly. In most countries identified, when there is retail regulation the KPIs are often different for the different operators and price regulation is flexible. But even an obligation to notify changes to prices can have a chilling effect on the normal course of competition, if it slows down the time to market for new products and services.

The EU example is interesting because within the EU there is a need to ensure that all member States follow common rules as much as possible and there is an imperative to create a single market. This is the reason why the European Commission has published a Recommendation on markets, starting for the very first one in 2003, to the latest one in 2014. Looking at the market identified, it is clear that retail regulation has become less and less important as liberalisation proceeds. Figure 59 illustrates this. In considering the European Recommendation(s), it would be important to bear in mind that each country is different and in each the conditions of competition are different. The fact that the European Commission has identified some markets, should not mean that the same markets should be identified by other countries.

Figure 59: Evolution of markets subject to review in the EU Recommendations on markets

2003 Recommendation[316]	2007 Recommendation[317]	2014 Recommendation[318]
	Retail	
1. Access to the public telephone network at a fixed location for residential customers	1. Access to the public telephone network at a fixed location for residential and non-residential customers	
2. Access to the public telephone network at a fixed location for non-residential customers		
3. Access to the public telephone network at a fixed location for non-residential custome^rs		
4. Publicly available international telephone services provided at a fixed location for residential customers		
5. Publicly available local and/or national telephone services provided at a fixed location for non-residential customers		
6. Publicly available international telephone services provided at a fixed location for non-residential customers		
7. The minimum set of leased lines (which comprises the specified types of leased lines up to and including 2Mb/sec as referenced in art 18 and Annex VII of the Universal Service Directive)		

316. Commission recommendation on relevant product and service markets within the electronic communications sector susceptible to *ex ante* regulation in accordance with Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communication networks and services (2003/311/EC).
317. Commission recommendation on relevant product and service markets within the electronic communications sector susceptible to *ex ante* regulation in accordance with Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communications networks and services (2007/879/EC).
318. Commission recommendation on relevant product and service markets within the electronic communications sector susceptible to *ex ante* regulation in accordance with Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communications networks and services (C(2014) 7174 final).

Figure 59 (continued): Evolution of markets subject to review in the EU Recommendations on markets

2003 Recommendation	2007 Recommendation	2014 Recommendation
Wholesale		
8. Call origination on the public telephone network provided at a fixed location	2. Call origination on the public telephone network provided at a fixed location	
9. Call termination on individual public telephone networks provided at a fixed location	3. Call termination on individual public telephone networks provided at a fixed location	1. Call termination on individual public telephone networks provided at a fixed location
10. Transit services in the fixed public telephone network		
11. Wholesale unbundled access (including shared access) to metallic loops and sub-loops for the purpose of providing broadband and voice services	4. Wholesale (physical) network infrastructure access (including shared or fully unbundled access) at a fixed location	3a: Wholesale local access provided at fixed locations (possible to include virtual access if requirements met)
12. Wholesale broadband access	5. Wholesale broadband access	3b: Wholesale central access provided at a fixed location for mass-market products
13. Wholesale terminating segments of leased lines	6. Wholesale terminating segments of leased lines, irrespective of the technology used to provide leased or dedicated capacity	4. Wholesale high-quality access provided at a fixed location
14. Wholesale trunk segments of leased lines		
15. Access and call origination on public mobile telephone networks, referred to (separately) in Annex I(2) of the Framework Directive in respect of Directives 97/33/EC and 98/10/EC		
16. Voice call termination on individual mobile networks	7. Voice call termination on individual mobile networks	2. Voice call termination on individual mobile networks
17. The wholesale national market for international roaming on public mobile networks		
18. Broadcasting transmission services, to deliver broadcast content to end users		

Remedies must be appropriate, that is, targeted to the particular issues identified and proportionate. They must also minimise the risk of regulatory failure. The following table (Figure 60) identifies issues and potential remedies. This is also an illustrative table: whether, given the issue identified, one particular remedy should be adopted or not will depend on the evidence and the circumstances of the case. In reviewing the practice of regulators, it seems that in some cases the regulators use a table such as this as a kind of 'menu' and apply the remedy without a proper understanding of their impact on the market. As it should be clear by now, this approach is not sound and may lead to the adoption of over-regulation in a market whose dynamics are not properly understood.

Figure 60: Remedies in SMP regulation

Competition Issue	Potential Remedies
Excessive prices	Charge control
	Ex ante margin squeeze
	Cost accounting
Input foreclosure (e.g., refusal to supply)	Obligation to provide network access (general and/or specific)
	Requirement not to unduly discriminate
	Publication of Reference Offer
	Notification of changes to charges and technical information
	Equivalence of inputs
	Accounting separation
	Cost orientation
Reduction in service quality (wholesale)	Quality of Service obligations (e.g., minimum standards, KPI reporting)

In the following section, we provide illustrative flowcharts relative to examples given.

Flowchart 1:

Historical Example

Question: when does a regulator regulate?

- Based on EU precedents: https://ec.europa.eu/digital-single-market/news/explanatory-note-accompanying-commission-recommendation-relevant-product-and-service-markets.
- Tables provided for illustration only, to aid those seeking to implement 'SMP regulation'. The actual markets exemplified are not real markets but are shown purely in order to provide an example of how the process may work in practice.
- Application of the rules requires access to evidence both for market definition and market analysis:
  - consumer surveys; market questionnaires
  - market data: pricing, market shares, quality of service, patterns of consumers switching between different operators.

Three-Criteria test:

1. The presence of high and non-transitory structural, legal or regulatory barriers to entry in the market.
2. The market structure does not tend towards effective competition within the relevant time horizon (having regard to the state of infrastructure-based and other competition behind the barriers to entry)
3. Competition law alone is insufficient to adequately address the identified market failure(s)

These criteria are applied cumulatively – only if they are all met is a market susceptible to ex ante regulation.

The test applies to overall market characteristics and structure, not to a specific operator (which is the focus of an SMP assessment).

Overview[319]

Step 1: Define product (Step 1(a))/ geographic markets (Step 1(b)) at the **retail level**. Are there geographic differences? Find what PRODUCT markets (1(a)) exist in a GEOGRAPHY (1(b))

Step 2: Are these markets effectively competitive at the retail level, in the absence of regulation? Apply the 3 criteria test. Test met?

No → No need to regulate

Yes

Step 3: Define the most upstream **wholesale market** for that (those) retail market(s).

Step 4: Repeat the same test as in Step 2, but this time to the wholesale market. Apply the 3-criteria test. Test met?

No → No need to regulate

Yes

Step 5: Does any operator in this market have Significant Market Power?

No → No need to regulate

YES

Step 6: Apply proportionate and appropriate remedies

Repeat analysis for the next downstream input

319. COLOUR CODING: In these flowcharts:
- **Pale blue** denotes a 'yes answer' and in some cases the consequences that derive from such an answer
- **Orange** denotes a 'no answer' and in some cases the consequences that derive from such an answer
- **Grey** denotes general information on the way in which SMP analysis is carried out
- **Green** denotes the choice of an example / the conclusion reached: as the analysis is carried out, we focus on one market at the time and we assume that the analysis has shown that: (i) there is a specific market definition; and (ii) after the analysis, the market as defined requires SMP regulation.

Step 1(a) – Define Product Market at retail level:

What electronic communications do consumers use? Voice, SMS, Data

Historical Example: product markets

Demand side substitutability: would consumers switch to one other type of service in response to a Small but Significant Increase in Price in another type of service? (e.g. from a voice call to a VoIP call? Or would they use an SMS or email instead of calling?)

Yes – consumers will switch

No – consumers will not switch (e.g. differences in quality; or app requirements, etc.)

Apply the SSNIP test on supply side: would a supplier of voice and SMS be able to provide an OTT service [in response to a SSNIP]* (and vice versa)?

Yes

No – supplier cannot become an OTT (or vice versa)

There is one market for data, voice and SMS.

There are two separate product markets: one for data and one for voice/SMS

Example given: There are two separate markets.
(1) Data
(2) Voice/SMS

Step 1(a) – Define Product Market at retail level (cont'd):

Example given: There is a market for data services separate from voice and SMS

Historical Example: product markets

How do consumers access data services? Mobile, Fixed, Cable

Demand side substitutability: do consumers switch to access data services in response to a Small but Significant Increase in Price in another type of service? (e.g., from mobile broadband to fixed broadband or vice versa)

Yes

No (differences in reliability, quality, usage, etc.)

Apply the SSNIP test on <u>supply side</u>: would a supplier of mobile data be able to switch to supply through cable or fixed in response to a SSNIP?

Yes

No - different networks and infrastructure

There is one product market for **data access through mobile and fixed networks.**

There are two separate markets: one for mobile and one for fixed (including cable).

Example given: There are two separate markets for data access through different networks

1. Fixed
2. Mobile

Step 1(a) – Define Product Market at retail level (cont'd):

Example given: Focus on the market for **data access through a fixed location**

Historical Example - Geographic markets

Are there differences depending on type of consumers?
E.g.: Enterprise v Residential?

Demand side substitutability: do enterprise consumers switch to enterprise data services in response to a Small but Significant Increase in Price in residential services (and vice versa)?

Yes

No - enterprises need bandwidth, resilient services, etc.

Apply the SSNIP test on supply side: would a supplier to a residential consumer be able to provide services to an enterprise in response to a SSNIP?

Yes

No

There is one market for data access through a fixed location to all customers.

There are two separate markets: one for residential fixed data access customers and one for enterprise customers

Other Questions – *Repeat the same exercise*
Are there other differences by customer (pre-paid and post-paid, high value and low value)?
Are there differences in technology (2G, 3G and 4G for mobile, standard and superfast for fixed)?

Example given – there is one product market for **data access through a fixed location** (includes all types of customers and technologies).

Step 1(b) – Define Geographic Market at retail level:

Example given – there is one product market for data access through a fixed location.

Historical Example: product markets

Are there differences depending on geographic area? By city, region, urban/rural, exchange or catchment are?

Apply the SSNIP test on demand side: would a consumer be able to access services from different providers in response to a Small but Significant increase in Price elsewhere?

Yes

No – some operators (e.g. cable) are only present in certain areas (e.g. urban).

Apply the SSNIP test on supply side: would a supplier in urban areas be able to provide services in rural areas in response to a SSNIP?

No

Yes

Are there significant differences in competitive conditions between urban and rural areas (or other geographic areas)?

No

Yes

There is a single national market for data services at a fixed location.

There are two separate geographic markets: one rural and one urban.

Example given – **there is a national market for data services at a fixed location**

Step 2 – Is it necessary to regulate?
Apply 3-criteria test /retail level

APPLY SAME TEST TO EACH RETAIL MARKET IDENTIFIED

Example: national market for data access through a fixed location

Absent any regulation (retail or wholesale), are there a sufficient number of players active for effective competition?

NO: apply the 3 criteria test

YES: the relevant retail market is COMPETITIVE: **no need to regulate**

TEST 1 - Are there high and non-transitory barriers to entry? NB: can be: → Yes

Structural: market entry or expansion of competitors is difficult. E.g. economies of scale; capacity constraints, high sunk costs, vertical integration

Legal/regulatory: planning permissions for roll out of network;

TEST 2 – the market structure does NOT tend towards effective competition? E.g. consider market shares, pricing, the state of infrastructure and service competition, barriers to expansion etc → Yes

TEST 3 – is competition law insufficient to address the potential market failures? → Yes

NO: if the answer to one of the three questions is no, the relevant market is competitive – **no need to regulate.**

Only if the answer to the all three questions is yes, the relevant retail market is not competitive **consider the relevant wholesale market**

Example given: The national retail market for data access through a fixed location is **NOT competitive**

Step 1 & 2 Recap (for illustration): historically in member States of the EU:

Historical Example EU – for illustration

In EUROPE traditionally **A RETAIL MARKET** is defined as:

DATA ACCESS AT A FIXED LOCATION (STEP 1)

Applying the three criteria test **(STEP 2)**

Absent regulation, there is not a sufficient number of competitors as typically there is one nation-wide fixed network and no alternative infrastructures (NB: this may be changing with the development of cable and the advent of new alternative infrastructures in certain geographic areas)

TEST 1: there are high and non-transitory barriers to entry;

TEST 2: the market structure does not tend towards effective competition in the timeframe considered, in the light of the investment required to replicate the fixed infrastructure

TEST 3: it is considered that competition law is not sufficient given the need to prove a likelihood of consumer harm and in the light of potentially complex technical remedies to be imposed (e.g. local loop unbundling)

CONCLUSION: in the EU, applying the tests, the retail market for data access at a fixed location is not competitive, absent regulation.

Step 3: Define the most upstream wholesale market(s) for those retail markets that are "not competitive" – repeat the exercise

Historical Example: product markets

What is the most upstream product available at the wholesale level to operators wishing to provide retail broadband at a fixed location?

"Wholesale Local Access at a fixed location" (WLA) market - product where access seekers have the most flexible control over the access lines. Note that this is an input for several retail products, such as narrowband, ADSL and ISDN.

Demand side substitutability: would access seekers switch in response to a SSNIP to alternative access (e.g. between cable, copper, fibre, mobile, etc.)?

Yes – substitutability between cable, copper and fibre

No – not enough substitutability with wireless (mobile)

Apply the SSNIP test <u>on supply side</u>: would a supplier of wireless WLA offer fixed WLA in response to a SSNIP (and vice versa)?

No – significant investment is required

There is a single WLA market

There are two separate markets: fixed and mobile WLA

Follow same steps looking at customer types, technology (standard, superfast, etc.). Following the same process as in Step 1(a) and 1(b) above, carry out geographic market definition for WLA

Example given: there is a single national wholesale market for fixed WLA that includes all types of customers and technologies.

Step 4 – Is it necessary to regulate? Apply 3-criteria test / wholesale level

Example given: Wholesale local access at a fixed location for data services

Absent any regulation, are there a sufficient number of players active for effective competition?

NO

TEST 1 - Are there high and non-transitory barriers to entry? NB: can be:

Structural: market entry or expansion of competitors is difficult. E.g. economies of scale; capacity constraints, high sunk costs, vertical integration

Legal/regulatory: planning permissions for roll out of network;

Yes

TEST 2 – the market structure does NOT tend towards effective competition? E.g. consider market shares, pricing, the state of infrastructure and service competition, barriers to expansion etc

Yes

TEST 3 – is competition law insufficient to address the potential market failures?

Yes

Only if the answer to the all three questions is yes, the relevant retail market is not competitive

Example given:
The national WLA market for data access through a fixed location is **NOT competitive**

Repeat Step 3: Define the next downstream market(s) for those retail markets that are "not competitive" – repeat the exercise

Historical Example: product markets

What products are available at the wholesale level to operators wishing to provide retail broadband at a fixed location?

"Wholesale Central Access at a fixed location" (WCA) market - access products where seekers have less direct and more standardized control over access line.

Demand side substitutability: would access seekers switch in response to a SSNIP to alternative access (e.g. between cable, copper, fibre, mobile etc.)?

Yes – substitutability between cable, copper and fibre

No – not enough substitutability with wireless (mobile)

Apply the SSNIP test <u>on supply side</u>: would a supplier of wireless WLA offer fixed WLA in response to a SSNIP (and vice versa)?

No – significant investment is required

There is a single WLA market

There are two separate markets: fixed and mobile WLA

Follow same steps looking at customer types, technology (standard, superfast, etc.). Following the same process as in Step 1(a) and 1(b) above, carry out geographic market definition for WLA

Example given: there is a single national wholesale market for fixed WLA that includes all types of customers and technologies.

Step 4 – Is it necessary to regulate? Apply 3-criteria test / wholesale level

Example given: Wholesale central access at a fixed location for data services

Absent any regulation, are there a sufficient number of players active for effective competition?

NO

TEST 1 - Are there high and non-transitory barriers to entry? NB: can be:

Yes

Structural: market entry or expansion of competitors is difficult. E.g. economies of scale; capacity constraints, high sunk costs, vertical integration

Legal/regulatory: planning permissions for roll out of network;

TEST 2 – the market structure does NOT tend towards effective competition? E.g. consider market shares, pricing, the state of infrastructure and service competition, barriers to expansion etc

Yes

TEST 3 – is competition law insufficient to address the potential market failures?

Yes

Only if the answer to the all three questions is yes, the relevant retail market is not competitive

Example given:
The national WCA market for data access through a fixed location **is competitive**

Step 5: Does any operator have Significant Market Power in markets that are not competitive?

Historical Example EU – for illustration

National WLA market for fixed data access has been deemed to be uncompetitive – does an operator have Significant Market Power (SMP)?

Factors to take into account

Market shares (existing and trend) - operators with high and stable (or increasing) market shares – above 50% - are likely to have a dominant position.

Excessive pricing and profitability - operators that generate (unregulated) returns that are consistently above cost of capital are unlikely to be constrained by competition.

Control of infrastructure not easily duplicated – can alternative operators readily develop their own networks to provide fixed WLA?

Barriers to entry and expansion – low entry barriers make it more likely that potential competition will prevent operators from exercising market power. Growth in market demand is sometimes a key factor (entry less likely in declining **markets).**

Product diversification –competitive entry into the supply of a product (or service) can be more difficult if a dominant firm can provide with it a portfolio of related products

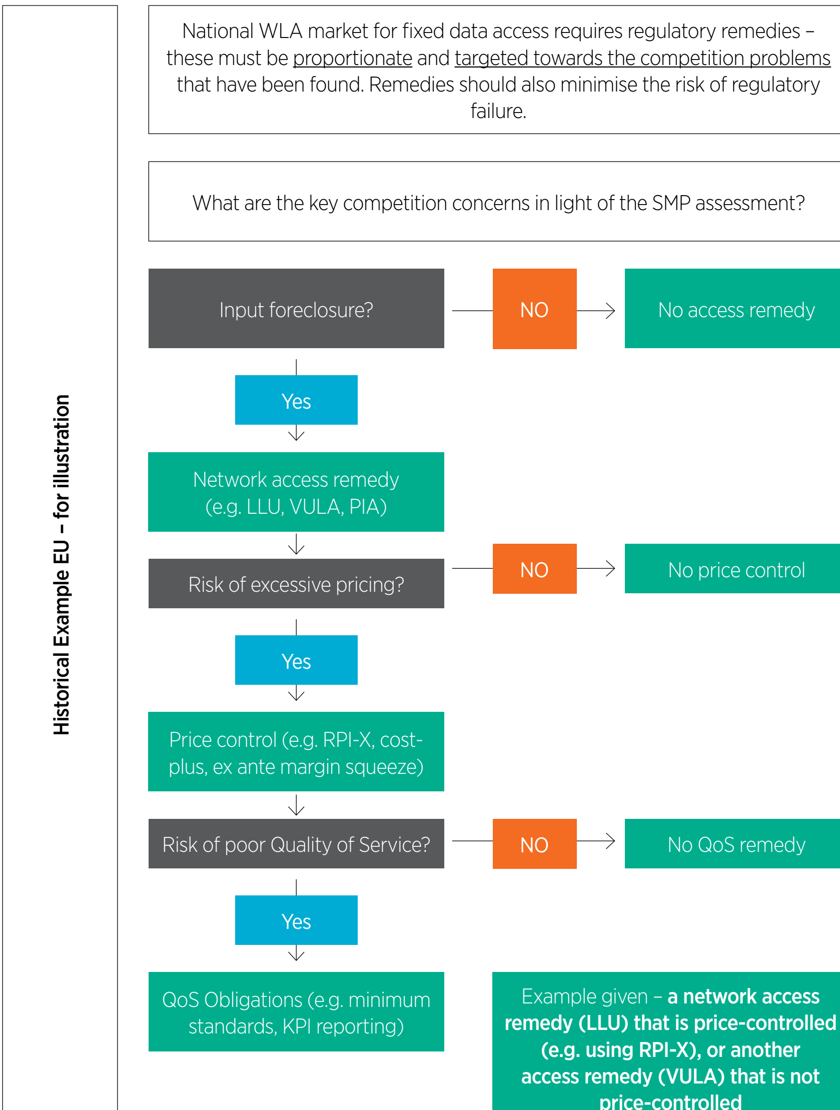
Countervailing buyer power – purchasers of WLA may be able to curtail the exercise of market power, for example if they purchase large volumes and can make a credible threat to switch supplier (or self-supply).

These might point towards different conclusions (e.g. low market shares but significant barriers to entry and excessive profits).

Assessment should be based on **overall evidence** and also take a **forward-looking** approach.

Example given: an operator has SMP in the provision of WLA for data at a fixed location

Step 6: Design appropriate and proportionate remedies



Flowchart 2:

New Economy Example

Question: when does a regulator regulate?

- Based on EU precedents: https://ec.europa.eu/digital-single-market/news/explanatory-note-accompanying-commission-recommendation-relevant-product-and-service-markets.
- Tables provided for illustration only, to aid those seeking to implement 'SMP regulation'. The actual markets exemplified are not real markets but are shown purely in order to provide an example of how the process may work in practice.
- Application of the rules requires access to evidence both for market definition and market analysis:
  - consumer surveys; market questionnaires
  - market data: pricing, market shares, quality of service, patterns of consumers switching between different operators.

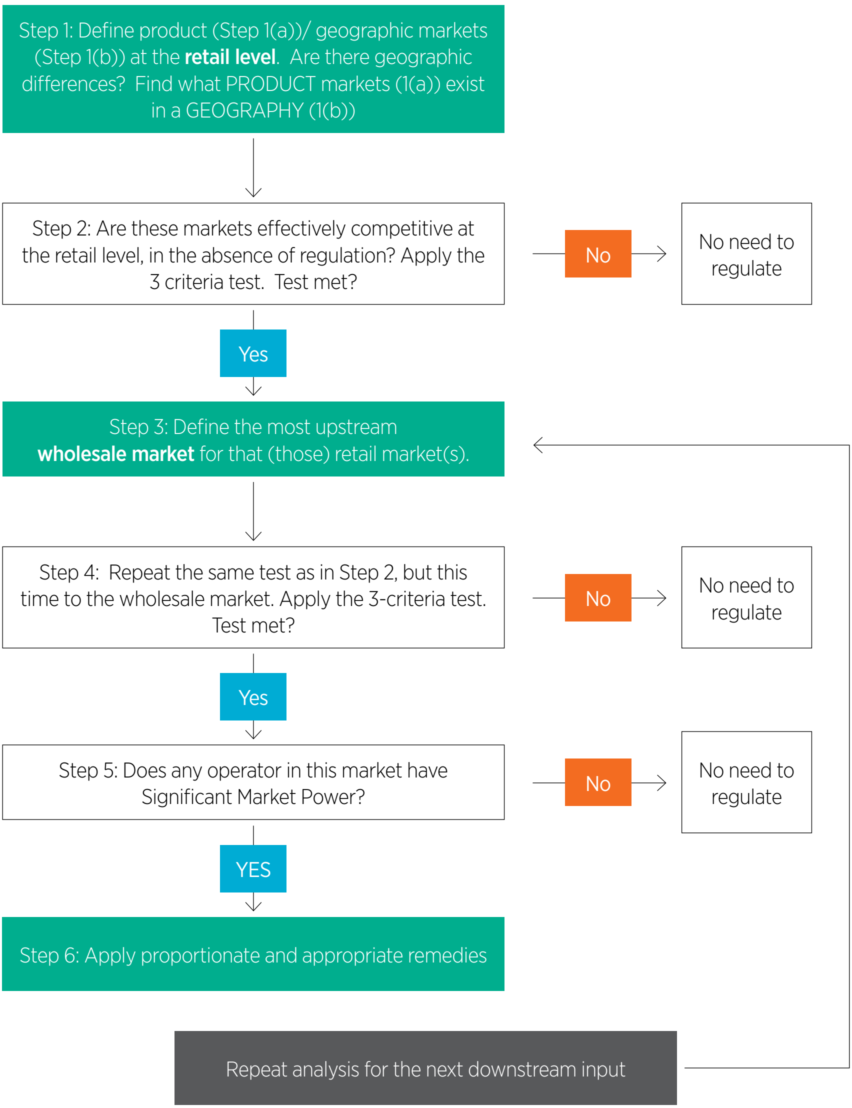
Three-Criteria test:

1. The presence of high and non-transitory structural, legal or regulatory barriers to entry in the market.
2. The market structure does not tend towards effective competition within the relevant time horizon (having regard to the state of infrastructure-based and other competition behind the barriers to entry)
3. Competition law alone is insufficient to adequately address the identified market failure(s)

These criteria are applied cumulatively – only if they are all met is a market susceptible to ex ante regulation.

The test applies to overall market characteristics and structure, not to a specific operator (which is the focus of an SMP assessment).

Overview[320]



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- **Green** denotes the choice of an example / the conclusion reached: as the analysis is carried out, we focus on one market at the time and we assume that the analysis has shown that: (i) there is a specific market definition; and (ii) after the analysis, the market as defined requires SMP regulation.

Step 1(a) – Define Product Market at retail level:

What electronic communications do consumers use? Voice, SMS, Data

Product markets

Demand side substitutability: would consumers switch to one other type of service in response to a Small but Significant Increase in Price in another type of service? (e.g. from a voice call to a VoIP call? Or would they use an SMS or email instead of calling?)

Yes – consumers will switch (high OTT take-up, minimal difference in quality)

No – consumers will not switch

Apply the SSNIP test on supply side: would a supplier of voice and SMS be able to provide an OTT service [in response to a SSNIP]* (and vice versa)?

Yes

No – supplier cannot become an OTT (or vice versa)

There is one market for data, voice and SMS.

There are two separate product markets: one for data and one for voice/SMS

Example given: There is one market that includes data and voice/SMS

Step 1(a) – Define Product Market at retail level (cont'd):

Example given: There is one market for data + voice/SMS services

Product markets

How do consumers access these services? Mobile, Fixed, Cable

Demand side substitutability: do consumers switch to access data services in response to a Small but Significant Increase in Price in another type of service? (e.g.. from mobile broadband to fixed broadband or vice versa)

Yes – minimal difference in quality, switching easier due to technology, spread of Wi-Fi etc.

No (differences in reliability, quality, usage, etc.)

Apply the SSNIP test on <u>supply side</u>: would a supplier of mobile data be able to switch to supply through cable or fixed in response to a SSNIP?

Yes – significant convergence

No

There is one product market for **data access through mobile and fixed networks.**

There are two separate markets: one for mobile and one for fixed (including cable).

Example given: There is a single market for data + voice/SMS services that can be accessed via mobile, fixed or cable platforms

Step 1(a) – Define Product Market at retail level (cont'd):

Example given: Single market for data + voice/SMS services on all platforms

Product Markets

Are there differences depending on type of consumers?
E.g.: Enterprise v Residential?

Demand side substitutability: do enterprise consumers switch to enterprise data services in response to a Small but Significant Increase in Price in residential services (and vice versa)?

Yes

No - enterprises need bandwidth, resilient services, etc.

Apply the SSNIP test on supply side: would a supplier to a residential consumer be able to provide services to an enterprise in response to a SSNIP?

Yes

No

There is one market for data access through a fixed location to all customers.

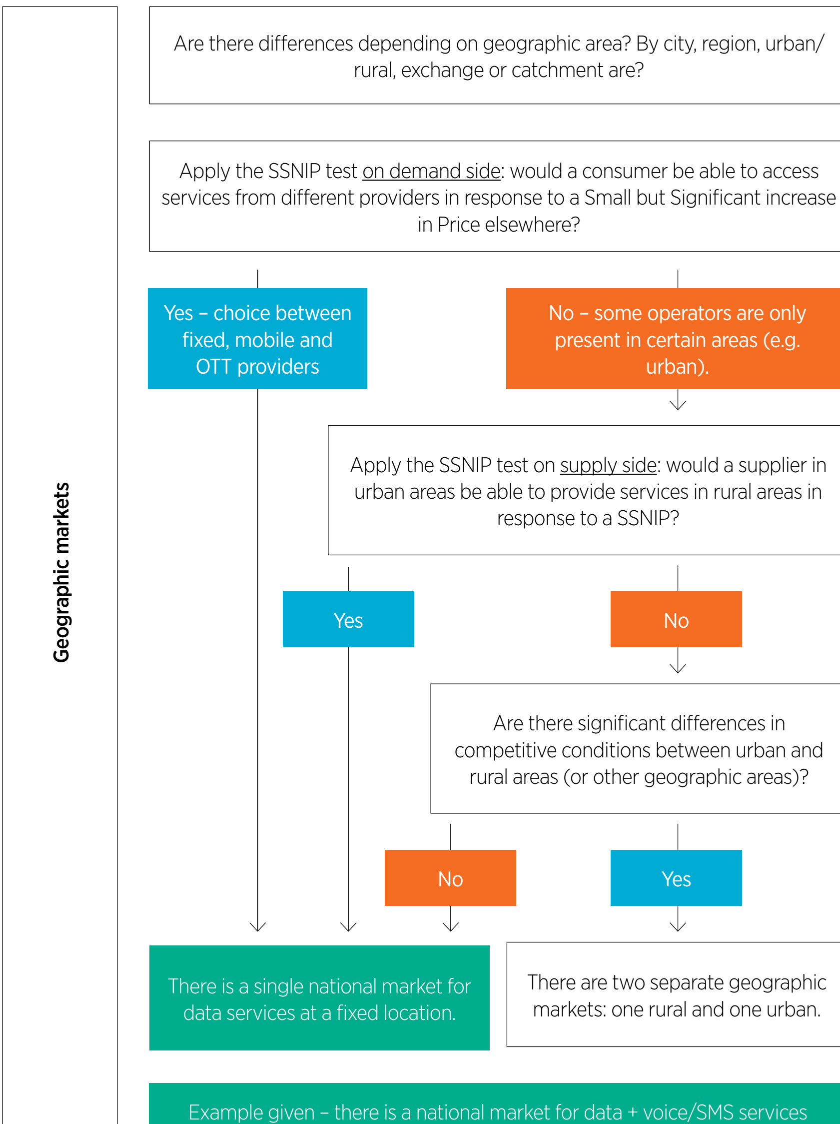
There are two separate markets: one for residential fixed data access customers and one for enterprise customers

Other Questions – *Repeat the same exercise*
Are there other differences by customer
(pre-paid and post-paid, high value and low value)?
Are there differences in technology
(2G, 3G and 4G for mobile, standard and superfast for fixed)?

Example given – there is one product market for data + voice/SMS services that includes all platforms and all types of customers and technologies.

Step 1(b) – Define Geographic Market at retail level:

Example given – there is one product market for data + voice/SMS services



Step 2 – Is it necessary to regulate? Apply 3-criteria test / retail level

APPLY SAME TEST TO EACH RETAIL MARKET IDENTIFIED

Example: national market for data + voice/SMS services (includes fixed and mobile)

Absent any regulation (retail or wholesale), are there a sufficient number of players active for effective competition?

NO: apply the 3 criteria test

YES: the relevant retail market is COMPETITIVE: **no need to regulate**

TEST 1 - Are there high and non-transitory barriers to entry? NB: can be: → Yes

Structural: market entry or expansion of competitors is difficult. E.g. economies of scale; capacity constraints, high sunk costs, vertical integration

Legal/regulatory: planning permissions for roll out of network;

TEST 2 – the market structure does NOT tend towards effective competition? E.g. consider market shares, pricing, the state of infrastructure and service competition, barriers to expansion etc → Yes

TEST 3 – is competition law insufficient to address the potential market failures? → Yes

NO: if the answer to one of the three questions is no, the relevant market is competitive – **no need to regulate.**

Only if the answer to the all three questions is yes, the relevant retail market is not competitive **consider the relevant wholesale market**

Example given: The national retail market for data + voice/SMS services **is competitive**. No need to consider the wholesale upstream market. No ex-ante regulation is necessary.

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