2009

Competition Law Enforcement in the Television Broadcasting Sector in Hong Kong: Past Cases and Recent Controversies

Thomas K. Cheng, University of Hong Kong

Available at: https://works.bepress.com/thomas_cheng1/4/
Guide to Authors

(1) Proposed contributions are invited and received on the understanding that they are final, and not preliminary drafts. They must not have been published or submitted for publication elsewhere and a statement to this effect should be included with the text submitted for publication. Only articles in English will be considered for publication.

(2) In general, the most acceptable length for articles is between 3,000-8,000 words. Under no circumstances will articles exceed 12,000 words.

(3) World Competition is a refereed journal. Every manuscript is submitted for peer review for the purpose of maintaining the standards of the journal.

(4) Due to strict production schedules it is not possible to amend texts after acceptance or send proofs to authors for correction. The Editors reserve the right to make alterations as to style, grammar, and punctuation.

(5) Articles which are submitted for publication must be accompanied by a 200-word abstract giving a brief description of the content. This abstract will be published online.

(6) Articles should be provided in an electronic form (preferably in Microsoft Word or Word Perfect).

(7) Higher Degrees, distinctions and the correct title of the author’s present position should appear in a footnote marked by an asterisk after the author’s name on the opening page of the article. General information about an article or acknowledgement for any assistance in its preparation may be added to this footnote.

(8) Special attention should be paid to quotations, footnotes, and references. All citations and quotations must be verified before submission of the manuscript. The accuracy of the contribution is the responsibility of the author. Contributors should be particularly cautious of material which could be considered defamatory or libelous.

(9) Footnotes should be numbered consecutively (so that if any footnote is added or deleted, all affected notes should be renumbered) and printed at the bottom of the right-hand page.

(10) Authors are encouraged to make reference to articles on the same or related topics previously published in World Competition.

(11) Articles should be cited as follows: author’s name, title of article in quotation marks, journal reference, e.g., Doris Hildebrand, ‘The European School in EC Competition Law’, W.Comp. 25 (2003): 1. Book references include the author/editor’s name, title of book in italics, edition, place of publication, publisher, year, and page reference; e.g., Carl Michael von Quitsow, State Measures Disturbing Free Competition in the EC (The Hague: Kluwer, 2002), 254. Guidelines for additional citation styles are available upon request.

(12) For cross-references, please use ‘above’ and ‘below’, e.g., as note 14 above.

(13) Tables should be self-explanatory and their content should not be repeated in the text. Do not tabulate unnecessarily. Tables should be numbered and may include a title. Column headings should be kept as brief as possible and descriptive text in narrow columns should be avoided.

(14) General style rules are:
(a) Abbreviations and acronyms should be spelled out in the first instance with the abbreviation following in parentheses.
(c) Case names should be italicized, e.g., Case C-286/88, Falciola v. Comune di Pavia, (1990) ECR 1-191. A reference to the relevant paragraph(s) in the judgment or decision should be provided.
(d) Use single quotation marks (‘ ’), with double quotation marks within single.
(e) Extracts should follow the original for spelling, punctuation and capitalization.
(f) All punctuation marks should appear outside the quotation marks unless the quotation includes an entire sentence.
(g) When using numbers, spell out zero to ninety-nine and use numerals for the rest, e.g., 120 or 1,200.
(h) Heading levels should be clearly indicated. (i) Oxford-z spelling is preferred, unless the whole article comes from an American author or the material is an extract from an American case or document.

(15) Contributions should be posted to José Rivas, Bird & Bird, Avenue d’Auderghem 22-28 box 9, 1040 Brussels, Belgium or sent electronically to jose.rivas@twobirds.com or world.competition@twobirds.com.
Competition Law Enforcement in the Television Broadcasting Sector in Hong Kong: Past Cases and Recent Controversies

Thomas K. Cheng

This article reviews the competition law regime in the television broadcasting sector in Hong Kong. This regime governs one of the only two sectors in Hong Kong subject to competition law enforcement until the government promulgates a cross-sector competition law. The article begins with an overview of the state of competition in the sector, highlighting trends in recent development that are relevant to competition law enforcement. This is followed by an examination of the two main competition provisions in the Broadcasting Ordinance and the guidelines issued by the Broadcasting Authority, the sectoral regulator. It argues that one of the greatest flaws in the provisions is their designation of the downstream market as the relevant market, hence exacerbating the limitations of a sectoral regime. This article continues with a critical review of the existing decisional practices, focusing on the regulator’s treatment of market definition, predatory pricing, and causation. It argues that the regulator has largely failed to apply rigorous analysis to these issues and has adopted an overly stringent standard for causation. It concludes with an analysis of a recent controversy in the sector – the dominant terrestrial broadcaster’s alleged imposition of exclusivity on artists, which prevent these artists from appearing on rival channels.

1. INTRODUCTION

The television broadcasting sector in Hong Kong has received intense media scrutiny over the last year. On 30 June 2009, the Legislative Council in Hong Kong conducted a hearing, inviting executives from both terrestrial television broadcasters, Television Broadcasts Limited (‘TVB’) and Asia Television Limited (‘ATV’), to testify. At the hearing, allegations were made regarding potentially anti-competitive conduct by TVB, a dominant terrestrial broadcaster with an approximately 80% share of the market. This was not the first time that these allegations have been made; they have surfaced time and again over the years. The Hong Kong media and general public have long lamented the sorry state of competition in the sector. Despite grave public concern, the government has historically taken a

---

1 TVB’s market share as measured by viewership has been consistently between 70% and 80% for the last two decades.
laissez-faire stance. There are signs, however, that things may change. Under the leadership of a new chairman, ATV seems keen to pressure the government to intervene. In addition, under a new chairman, the Broadcasting Authority (‘BA’) may be ready to respond. There is thus no better time to take stock of competition law enforcement in the television broadcasting sector.

Under the government’s long-cherished sectoral approach, that sector and the telecommunications sector are the only two subject to competition law enforcement.

Between these two sectors, television broadcasting has seen more active enforcement. Of the twenty-eight cases that have been decided thus far by the Telecom Appeal Board, which hears cases arising under the sectoral regulatory regime, only two have raised genuine competition law issues. Both of them, however, were decided on procedural grounds. Meanwhile, there have been eight competition cases in the television broadcasting sector, all of which were decided on the substantive merits. Therefore, television broadcasting is practically the only sector in Hong Kong where meaningful analysis of competition law enforcement can be done. A detailed examination of the decisional practices reveals a timid and occasionally misguided approach to competition law enforcement and limitations of the sectoral approach.

In addition to its pioneering role in competition law enforcement in Hong Kong, the city’s television broadcasting sector is a worthwhile subject of research because of its economic and cultural significance in the city and beyond. Hong Kong boasts one of the most advanced television industries in Asia. TVB has been said to be the largest television broadcaster in Asia outside of Japan and has in its possession the largest library of Chinese programmes in the world. It is one of the few terrestrial broadcasters in developed economies to have withstood the onslaught of cable television. Now Broadband television (TV), the largest subscription television service provider in the city, is one of the pioneers of Internet Protocol television (IPTV) and one of its largest operators in the world. The Hong Kong media, be it television broadcasting, film, or music, have long exerted oversized influence over the Chinese-speaking world. TVB programmes are ubiquitous in the Chinese Diaspora across the globe. Its dramas are followed, often religiously, wherever Chinese is spoken. The state of competition among the television broadcasters in Hong Kong hence carries significance well beyond the border of the city.
This article examines the state of competition law enforcement in the television broadcasting sector in Hong Kong. Section 2 provides a brief overview of the sector in general. Section 3 introduces the institutional framework for enforcement, the relevant statutory provisions, and the guidelines issued by the regulator, the BA. Section 4 critiques the eight cases that have been decided by the BA thus far in light of established competition law principles and the jurisprudence of more advanced jurisdictions. Section 5 analyses the conduct allegedly perpetrated by TVB that has created the recent furor, its exclusivity arrangements with musical artists. Section 6 concludes this article.

2. AN OVERVIEW OF THE TELEVISION BROADCASTING SECTOR IN HONG KONG

The television broadcasting sector in Hong Kong has undergone rapid changes in recent years. For decades since TVB began broadcasting in 1967, there were only two terrestrial broadcasters in Hong Kong, TVB and ATV. The government attempted to introduce competition to the sector in mid-1970s by granting an operating license to Commercial Television. However, that company encountered insurmountable financial and operational problems and shut down in 1978. Since then, the sector remained a duopoly until the 1990s. In 1991, Starvision Hong Kong Limited (then known as Hutchvision Hong Kong Limited, also generally known as Star TV) became the city’s first satellite television programme service operator. Its service was not primarily targeted at Hong Kong and was broadcasted across Asia. Its programmes could only be received through satellite antennae, and hence its domestic coverage was not sufficiently broad to present a serious challenge to the two terrestrial broadcasters.

Such a challenge emerged in 1993, when the government granted a subscription television franchise to Wharf Cable to operate the city’s first cable television service. Wharf Cable (now called i-Cable) utilized the most advanced technology at the time – hybrid fibre coaxial cable – and laid an extensive cable network that now covers some 90% of the households in Hong Kong. A few years later, another subscription television service provider emerged. PCCW Limited (then Hong Kong Telecom), the incumbent telecom monopoly in Hong Kong until 1998, launched a video-on-demand service in the same year. With the universal coverage of its fixed-line telephony network, PCCW made use of Internet Protocol multicast technologies to provide internet-based...
broadcasting services, branded Now Broadband TV (‘Now TV’), to the city.¹⁶ In June 2008, Now TV overtook i-Cable and became the largest subscription television service provider in Hong Kong.¹⁷ Aside from i-Cable and Now TV, TVB also joined the fray and launched its subscription television venture, Galaxy (now called TVB Pay Vision), in the early 2000s. Finally, Hong Kong Broadband Network Limited recently began offering television broadcasting via its broadband network. For a city of seven million residents, Hong Kong is served by a sizable number of broadcasters. According to an executive of one of the broadcasters, there are currently over 300 channels available in Hong Kong, greater than the number of channels available in China.¹⁸

Competition among the subscription television service providers has been keen since the emergence of Now TV. For more than a decade, i-Cable was the dominant provider. A competition decision by the BA in 2004 put i-Cable’s market share at 69%.¹⁹ The initial uptake of Now TV was surprisingly small.¹⁰ By the end of 2007, however, the two operators split the subscription television market, with roughly 882,000 subscribers each.²¹ Now TV has since overtaken i-Cable as the largest subscription television service provider in the city. As of mid-2009, Now TV was on the brink of surpassing the one-million mark with 992,000 subscribers,²² while i-Cable commanded a subscriber base of 947,000.²³ i-Cable’s continued growth is constrained by the technology it has chosen, hybrid fibre coaxial cable, which requires the company to install its own cable network.²⁴ Meanwhile, Now TV has access to practically all the households in Hong Kong by virtue of PCCW’s fixed-line telephony network. TVB has also ventured into subscription television. TVB Pay Vision is a joint venture of TVB and other investors and is a distant third behind Now TV and i-Cable.²⁵ The newest entrant into the sector is Hong Kong Broadband. Aside from these four companies, there are Yes TV from the UK and Taiwan’s Pacific Digital Media, which provide limited service. These operators together make up a very competitive subscription television market.

The state of competition in terrestrial broadcasting, in stark contrast to its subscription counterpart, has remained largely stagnant for decades. There are two terrestrial broadcasters in Hong Kong each operating two channels, one in Cantonese Chinese and one in English. TVB’s Cantonese and English channels are called Jade and Pearl, respectively.

---

¹⁶ Consultation, supra n. 6, 2.
¹⁸ Transcript of Interview with TV Industry Executive (on file with author), 11.
²⁰ Kenny, supra n. 7, 286. At the time of its launch, Now TV only managed to sign up 40,000 subscribers, compared to the close to one million subscribers now.
²⁴ Interview Transcript, supra n. 18, 11–12.
²⁵ There is no recent subscriber number available for TVB Pay Vision. There was no mention of subscriber figures in TVB’s most recent interim results. The Interim Results only noted that TVB Pay Vision’s subscription base ‘continued to improve’. However, the Interim Results also noted that TVB’s share of Pay Vision’s loss in the year to 30 Jun. 2009 was HKD 30 million. See Television Broadcasts Ltd., Announcement of 2009 Interim Results (2009), 21.
while ATV’s Cantonese and English channels are Home and World. The market share of TVB Jade, as measured by viewership, has been hovering between 70% and 80% for decades. According to viewership figures from 2007, the prime time viewership for TVB’s Cantonese channel on average was around twenty points.\(^{26}\) One point represents 1% of the total population, which is roughly seven million people.\(^{27}\) In other words, one point represents approximately 70,000 people. The average prime time viewership for ATV during the same period was roughly four and a half points, which gives TVB a market share of about 81.6%. The average full-day viewership for TVB in 2007 was roughly seven and a half points, while that for ATV was about two points. That gives TVB a market share of about 79%. According to TVB’s 2009 interim report, its share of the local television broadcast market in the Cantonese language during weekday prime time was 84%.\(^{28}\) Its share in the English television broadcast market during prime time was 75%.\(^{29}\) In terms of advertising revenue, TVB also holds a similar market share. It accounts for about 80% of the revenue generated in the local television-advertising market every year.\(^{30}\) ATV’s struggles are well known; the company reportedly loses more than HKD 1 million a day.\(^{31}\)

There are a number of explanations for TVB’s dominance in terrestrial broadcasting. First, due to its stranglehold on artists and actors, TVB has been able to produce popular dramas and music programmes. In contrast, much of the drama production at ATV has been largely outsourced.\(^{32}\) Dramas produced by foreign broadcasters and dubbed into Cantonese have come to account for an increasing proportion of ATV’s dramatic offerings in the last decade. Meanwhile, TVB continues to produce some of the most popular dramas. The company reportedly produces 6,000 hours of programming a year.\(^{33}\) This dwarves the roughly 1,000 hours of programming produced by its rival.\(^{34}\) Given its long operational history, TVB had accumulated more than 50,000 hours of Cantonese programming as of 2002.\(^{35}\) Second, regulatory barriers have made it very difficult for potential entrants to enter the terrestrial broadcasting market. The Broadcasting Ordinance imposes stringent restrictions on cross-media ownership, which has effectively shut out operators with experience in other types of media from terrestrial broadcasting.\(^{36}\) i-Cable is

---

\(^{26}\) Viewership figures in Hong Kong are compiled by a private company called CSM Media Research for 2006 to 2011. These figures are not readily available to the public and must be obtained from the company. The author was able to obtain the 2007 viewership figures from one of the terrestrial broadcasters.


\(^{28}\) See 2009 Interim Results, supra n. 25, 17.

\(^{29}\) Ibid.

\(^{30}\) Granistas, supra n. 4, 51.

\(^{31}\) Li, supra n. 5, 15.

\(^{32}\) Furniss, supra n. 2, 14.

\(^{33}\) Granistas, supra n. 4, 50.

\(^{34}\) A Brief Introduction, supra n. 9.

\(^{35}\) Ibid.

\(^{36}\) The Broadcasting Ordinance prohibits advertising agencies, newspaper publishers, and holders of broadcasting licenses from applying for a domestic broadcasting license.
rumoured to be interested in launching a terrestrial broadcasting service but has been unable to do so due to regulatory hurdles. Third, and perhaps most relevant to this article, TVB has allegedly engaged in exclusionary conduct, which has hampered ATV’s ability to compete. According to these allegations, TVB has entered into exclusive arrangements that require musical artists to perform only on its channels. Artists who have entered into such arrangements are prohibited from performing for competing broadcasters and may only be interviewed in a language other than Cantonese. In fact, the existence of these arrangements is beyond the realm of allegations; the government itself has acknowledged their prevalence. Incredibly, in April 2000, the government proposed an exemption from the competition provisions of the Broadcasting Ordinance for these exclusivity contracts. According to the government, these contracts are ‘the industry practice’, and ‘competition law is not the vehicle to deal with unreasonable restrictions imposed on artistes by their contract terms’. It is these exclusive contracts to which this article will turn in section 4.

3. THE COMPETITION LAW ENFORCEMENT REGIME IN THE TELEVISION BROADCASTING SECTOR

3.1. THE ENFORCEMENT INSTITUTIONAL STRUCTURE

The sectoral regulator responsible for enforcing the Broadcasting Ordinance is the Broadcasting Authority (BA), which is a statutory body established under the Broadcasting Authority Ordinance. The BA is consisted of six to nine non-official members and three official members. The BA does not have its own executive arm. It relies on a government department, the Broadcasting Division of the Television and Entertainment Licensing Authority (’TELA’) for administrative and executive support. Members of the BA, including the Chairman, only serve on a part-time basis. The highest ranked full-time government official in charge of television broadcasting is the Commissioner for Television and Entertainment Licensing, who heads TELA. Complaints under the competition provisions of the Ordinance are investigated by the TELA staff and adjudicated by the Complaints Committee of the BA.

37 Interview Transcript, supra n. 18, 8. Under s. 4(1)(b) of Sch. 1, Part 1 of the Broadcasting Ordinance, a licensee providing one category of broadcasting services is prohibited from applying for a license in another category. Furthermore, s. 8(3) of the Ordinance provides that a domestic free television programme service license may not be granted to a subsidiary of a parent company. These two provisions have practically rendered it impossible for a company such as i-Cable to enter the terrestrial broadcasting service market. TVB circumvents these restrictions by keeping its share ownership of TVB Pay Vision below 50% to ensure that it does not have control over a subscription television service provider. According to its 2009 Interim Results, TVB owns 29% of the shares of TVB Pay Vision. See 2009 Interim Results, supra n. 25, 21.

38 Hong Kong SAR Government, Bills Committee on Broadcasting Bill – Competition Provisions in Relation to Artiste Contracts (2000), Paper No. CB(2)1722/99-00(01).

39 Ibid., 1.

40 Consultation document, supra n. 6, 5.

41 Ibid.

42 Ibid.

43 Ibid.

44 Consumer Council, supra n. 10, 18.
3.2. THE RELEVANT STATUTORY PROVISIONS

Competition law enforcement in the television broadcasting sector began in the 1990s, when the government inserted a ‘free competition’ clause into the license granted to Hutchvision at the end of 1990.\(^{45}\) The government then proceeded to incorporate similar clauses in the licenses granted to Wharf Cable and the two terrestrial broadcasters.\(^{46}\) This approach paralleled that pursued by the government to introduce competition law to the telecommunications sector.\(^{47}\) It is not without drawbacks, however. First, the free competition clause in each license differed slightly, depending on the negotiation between the government and the operator.\(^{48}\) This is obviously undesirable as it would lead to disparate competition law enforcement against different operators. Second, public enforcement of the license conditions is hampered by the fact that, with the exception of those of the terrestrial broadcasters, licenses were generally not available to the public.\(^{49}\) Therefore, if a member of the public was aggrieved by an allegedly anti-competitive practice by a non-terrestrial broadcaster, it would be difficult for him to find out whether he could seek redress under the free competition clause governing that particular licensee. In fact, strictly speaking, the license is a contract between the government and the licensee and it is not clear that a member of the general public has standing to enforce provisions in that contract.\(^{50}\)

The next major step in the development of competition law in the sector took place in 2000, when the Broadcasting Ordinance was enacted. The Ordinance contains four competition-related provisions, sections 13 to 16.\(^{51}\) Sections 13 and 14 are the two main substantive provisions.\(^{52}\) Section 13, titled ‘Prohibition of anti-competitive conduct’, is concerned with concerted practices and restrictive agreements. Section 14 prohibits abuses of dominance. They were modelled after Articles 101 and 102 of the Treaty on the Functioning of the European Union (TFEU).\(^{53}\) For instance, section 13 uses the language ‘preventing, distorting or substantially restricting competition’. In subsection (2), it lists examples of prohibited practices, which by and large repeat the four enumerated practices in Article 101(1). Subsection (3), like Article 101(2), holds any agreement in contravention of subsection (2) to be void. Subsection (4) allows the BA to grant exemptions from subsection (2). However, unlike Article 101(3), subsection (4) does not spell out the conditions that must be met for an agreement to be exempted. The BA is simply allowed to grant exemptions ‘on a prescribed ground’. This open-ended language reflects the government’s desire to retain considerable discretion for the BA. Section 14 also shares

---

\(^{45}\) Ibid., 31.
\(^{46}\) Ibid.
\(^{47}\) Competition law provisions were first incorporated in the licenses granted to the telecom operators.
\(^{48}\) Ibid., 31.
\(^{49}\) Ibid.
\(^{50}\) Ibid.
\(^{51}\) For details of these provisions, see Appendix A.
\(^{52}\) Section 15 contains provisions supplementary to ss 13 and 14. It sets out the statute of limitations, the scope of the private right of action, and the application of ss 13 to 14 to associates of a licensee. Section 16 empowers the BA to issue cease-and-desist orders.
\(^{53}\) This is contrary to the competition provisions in the Telecommunications Ordinance, which were modelled after Australian law.
some notable similarities with Article 102, including an enumeration of proscribed abuses. Section 14(5) lists predatory pricing, price discrimination, and tying as examples of abuse of dominance.

Despite being modelled after Articles 101 and 102, sections 13 and 14 suffer from a number of infirmities. First, both sections 13 and 14 are expressly restricted to apply only to the television programme service market. The jurisdictional reach of these two sections is further elaborated in a set of guidelines issued by the BA. In those Guidelines, the BA emphasizes that ‘the focus of its regulation should be on the conduct of licensee in a downstream market’.54 This has led to some interpretive difficulties for the BA in subsequent enforcement and caused the BA to arrive at some flawed results. This will be elaborated in section 4. Due to the sectoral nature of the provisions in the Ordinance, it is inevitable that they only apply to the television broadcasting industry. However, there is no reason that the provisions must be limited to the downstream market. In fact, the counterparts of these two sections in the Telecommunications Ordinance apply to any telecommunications market.55 If sections 13 and 14 had been drafted to apply to any television broadcasting market, much of the BA’s difficulty would have been avoided. The BA has attempted to minimize the impact of this jurisdictional restriction by asserting in the Guidelines that conduct in the upstream market may result in anti-competitive effects in the downstream television programme service market.56 This has in turn required the BA to distinguish between direct and indirect effects on the downstream market.

Second, section 14(4) states that a licensee is deemed to have abused its dominant position if it has engaged in conduct ‘which has the purpose or effect of preventing, distorting or substantially restricting competition in a television programme service market’. To condemn a conduct as an abuse of dominance solely based on its purpose is inconsistent with the jurisprudence of both the United States and the EU57 and would practically result in a per se approach in some abuse of dominance cases. This approach has been rejected by Professor Richard Whish as inappropriate for Article 82. Given the difficulty in distinguishing between legitimate competitive conduct and proscribed abuses by a dominant firm, a per se rule for abuse of dominance would result in over-deterrence and discourage dominant firms from competing vigorously. In this respect, section 14(4) is similar to section 46 of the Australian Trade Practices Act, which prohibits misuse of substantial market power. Under section 46, there is no need to show the anti-competitive effect of the conduct; a showing of a proscribed purpose suffices.58

55 Telecommunications Ordinance (Cap. 106), ss 7K and 7L.
56 BA Guidelines, supra n. 54, para. 14.
57 Professor Richard Whish notes in the most recent edition of his textbook that ‘[i]n the opinion of this author there should be no per se rules under Art. 82; to put the point another way, behaviour should be held to be abusive only where the Commission can demonstrate, to the required degree, that it has or would lead to harm to consumers’. See R. Whish, Competition Law, 6th edn, 196. The court of Appeal for the District of Columbia (D.C.) Circuit in the United States stated in the Microsoft case that ‘to be condemned as exclusionary, a monopolist’s act must have an “anti-competitive effect.” United States v. Microsoft Corp., 253 F.3d 34, 58 (D.C. Cir. 2001).
58 R. Miller, Miller’s Competition Law and Policy, 1st edn, 168.
Section 13 is noteworthy in the substantial deference it shows to intellectual property. Subsection (6) declares that the application of section 13 shall not ‘prejudice the existence of any rights arising from the operation of the law relating to copyright or trademarks’. Subsection (6) has not been interpreted in a BA decision thus far and its scope remains to be clarified. There is a range of possible interpretations for this subsection. The broadest one is that whenever there is a conflict between copyright or trademark laws on the one hand and section 13 on the other hand, section 13 yields. However, it is worth noting that subsection (6) uses the word ‘existence’ instead of the word ‘exercise’. Therefore, it is plausible to adopt a much narrower interpretation that section 13 applies so long as it does not negate the existence of a copyright or trademark. There is much scope for restricting the exercise of copyright and trademark rights without negating their existence. Which of these interpretations, or an intermediate position between them, is correct must await further explication by the BA. Interestingly, this carve-out is only found in section 13; section 14 does not contain a similar provision. This omission means that the intellectual property rights of a dominant licensee are shown less deference. It is conceivable that copyrighted materials that have been deemed to be essential to competition will not be susceptible to compulsory licensing when they are in the possession of a non-dominant licensee but will be so when in the possession of a dominant operator.

Section 13(5) contains two further exemptions. The simpler one of the two comes under paragraph (b), which cryptically excludes ‘any prescribed restriction’ from the application of section 13(1). The Guidelines explain that paragraph (b) is intended to allow the Chief Executive in Council, which is the ultimate authority on broadcaster licensing issues, to stipulate additional grounds for exemptions. The Guidelines note that at the time of their publication on 11 May 2007, no additional grounds for exemption have been stipulated. The second one is stated in paragraph (a), which expressly exempts television programmes ‘produced wholly or substantially by the licensee’ from the application of section 13. The definition of ‘substantial production’ is pivotal to the application of the exemption. The BA has interpreted the meaning of substantial production in a different context in a 2005 case. That case involved a clause in then-Galaxy’s license, which imposed a twelve-month delay period for programmes substantially produced by TVB. TVB’s programmes can only be shown on Galaxy after this period has elapsed. Galaxy was TVB’s subsidiary. This firewall provision was inserted into Galaxy’s license to prevent it from gaining an unfair advantage in programming over its subscription television rivals. The programme at issue in the case was a Korean drama series that TVB had supplied to Galaxy in less than twelve months after it had been broadcasted by TVB itself. If the series were deemed to have been substantially produced by TVB, Galaxy would have been in breach of the license restriction. The series was produced by a Korean broadcaster. What

59 Broadcasting Ordinance (Cap. 562), s. 13(6).
60 Ibid., para. 20.
61 Ibid.
TVB did consisted of ‘dubbing the Cantonese sound track, preparing the Cantonese script, providing Chinese subtitles and captions, commissioning Cantonese theme songs and conducting promotion campaigns’ \(^{63}\). The BA held that the work undertaken by TVB with respect to this drama series did not amount to substantial production and hence TVB was not in breach of the license restriction. This rather narrow interpretation of substantial production has considerably limited the scope of the exemption under section 13(5)(a).

Subsection (5) overlaps with subsection (6) to an extent. Television programmes that are substantially produced by a licensee presumably will be subject to copyright protection and will benefit from the section 13(6) carve-out. The section 13(5) exemption, however, potentially goes much further than that under section 13(6). Section 13(5) can be interpreted to give a licensee carte blanche to undertake any kind of anti-competitive conduct with respect to a programme it substantially produced. For instance, it may exempt a price fixing agreement among licensees regarding the royalty they charge for sublicensing their programmes. Meanwhile, it is unlikely that section 13(6) will be interpreted this expansively. It merely states that section 13 will not prejudice the existence of any copyright or trademark right. It would be a stretch to argue that intellectual property rights empower the licensees to fix prices or allocate markets. The BA is yet to grant an exemption under section 13(5). Therefore, the scope of the exemption remains to be determined. Again, the exemptions in section 13(5) are not available under section 14.\(^{64}\) In terms of the absence of exemption provisions, section 14 is similar to Article 102. However, the Community courts have developed the notion of objective justification, which excuses conduct that may be otherwise deemed to be abusive under Article 102. There is no mention of the possibility of an objective justification in the Guidelines or the decisional practices. In fact, the BA is yet to find a licensee to have violated section 14. It thus remains unclear whether any such justification will be accepted.

3.3. THE GUIDELINES

The BA has issued a set of guidelines to provide more guidance to licensees on the application of sections 13 and 14. These Guidelines are by and large consistent with the established principles and practices in other jurisdictions. The analytical framework set out in the Guidelines should be familiar to competition law practitioners from other jurisdictions. In paragraph 26, the Guidelines lay out the three analytical steps: market definition, assessment of market power, and assessment of the purpose and effect of the conduct.\(^{65}\) The Guidelines take care to emphasize that the analytical process is not always linear and the three steps may be sometimes integrated.\(^{66}\) The Guidelines note that the special cost features of the sector – high fixed costs and low or negligible marginal costs – do not

---

\(^{63}\) Ibid.

\(^{64}\) BA Guidelines, supra n. 54, para. 20.

\(^{65}\) Ibid., para. 26.

\(^{66}\) Ibid., para. 27.
fundamentally alter the analytical framework. In terms of market definition, the Guidelines state that in most instances, the relevant geographic market will be the entire Hong Kong. They further note that the temporal dimension of market definition is particularly important for television broadcasting because of the time-sensitive nature of television programming. For certain types of programme such as sports events, live coverage will be much more highly sought after by consumers than a subsequent broadcast.

In terms of assessment of market power, one can again detect the influence of EU law in the market share guidance in the Guidelines. Similar to the presumption of dominance laid down in the AKZO case by the European Court of Justice, paragraph 55(a) of the Guidelines states that there is a rebuttable presumption of dominance with a persistent market share of over 50%. The Guidelines emphasize the importance of persistent market share due to high volatility of market share in television broadcasting. Similar to EU law, the Guidelines note that dominance may be found with under 40% market share if a host of other conditions is met. With respect to market share, the Guidelines acknowledge that there are a few possible bases for calculating it in the sector, namely, ‘the number of subscribers, the hours of viewing or the share of advertising revenue’. However, a quick review of the decisional practices shows that the BA has almost never used advertising revenue to calculate market shares. If a case involves a terrestrial broadcaster, the BA has relied on viewership figures. If a case only concerns the subscription service providers, the BA has resorted to the number of subscribers.

Finally, in terms of assessment of the competitive effects of conduct, the Guidelines maintain that conduct that has either the purpose or the effect of distorting competition would be deemed to be anti-competitive. However, the remainder of the section on assessment of competitive effects focuses primarily on effects. There is little guidance on how the BA will ascertain an anti-competitive purpose. Ironically, the Guidelines state that the BA will seek to ascertain whether certain conduct has the purpose or effect of distorting competition by way of the ‘Substantial Effects Test’. The puzzling implication is that the nature of the purpose of a conduct is to be determined by its effects. What seems clear is that the BA has eschewed the Australian approach to the ‘purpose’ language in section 46 of the Trade Practices Act, which requires the courts to ascertain the subjective intent behind a firm’s conduct. Under that section, a conduct will only constitute misuse of substantial market power if it is undertaken for the proscribed purpose of eliminating or substantially

---

67 Ibid., para. 28.
68 Ibid., para. 43.
69 Ibid., para. 28.
70 Ibid., para. 55(c). The factors identified include ‘the existence of very weak competitors, substantial barriers to market entry and limited buyer/supplier countervailing power’.
71 Ibid., para. 56.
72 Given that a terrestrial broadcaster has no subscribers, it makes little sense to calculate its market share based on subscriber number.
73 Ibid., para. 68.
74 Ibid.
75 Miller, supra n. 58, 187.
damaging competitors. This determination opens a whole range of complex issues regarding the attribution of intent to a corporation, which, as a fictional legal entity, obviously has no intent of its own. This complication is compounded by the fact that a corporation often acts with a host of intentions. Weighing the relative importance of different intentions and determining the dominant intention is at best an inexact exercise. The BA has probably done well in shunning that path. Despite some of its confusing statements about anti-competitive purpose in the Guidelines, the BA’s approach to the purpose–effect dichotomy is similar to the EU’s treatment of object and effect under Article 101. In paragraph 71 of the Guidelines, the BA lists price fixing and minimum resale price maintenance as being assumed to have substantial anti-competitive effects even if the parties’ combined market share is below 25%. Despite its mention of substantial effects, this paragraph effectively ascribes to these two types of conduct the purpose or object of distorting competition. The disparate nomenclature notwithstanding, both the BA and the EU presume certain market conduct to be anti-competitive.

4. Analysis of the Existing Decisional Practices

The BA has decided eight cases since the Broadcasting Ordinance was adopted in 2000. The first case was closed in June 2002, and the most recent one in October 2008. i-Cable or its predecessor has featured prominently in these cases. Six of these eight cases were filed against i-Cable. The other two were lodged against TVB, Galaxy, and ATV. Of the eight cases, two have involved predatory pricing, three acquisitions of exclusive broadcasting rights, one market allocation/bid rigging, one exclusive dealing arrangement, and lastly, one practices that hinder customers from switching to a competitor’s service. Interestingly, the BA is yet to find a single infringement in its nine-year history of competition law enforcement. BA’s investigation procedures provide for two stages of investigation, the preliminary enquiry stage and the full investigation stage. Seven of these eight cases were closed after the preliminary enquiry stage. Only one of them, the market allocation case, was dismissed after a full investigation. However, the BA did find TVB to have infringed the firewall provisions in the license of Galaxy in 2005 and imposed a HKD 500,000 fine and a HKD 350,000 fine on TVB and Galaxy, respectively. These remain the only fines the BA has imposed so far on competition-related violations.

Both predatory pricing cases have been filed against i-Cable. The first one (hereinafter 2002 World Cup Package case), which was the first competition case under the Broadcasting Ordinance and decided in 2002, involved two promotions by the operator, the ‘Be My Valentine’ package and the ‘2002 World Cup’ package. Under the first package, i-Cable reduced its monthly subscription fee from HKD 298 to HKD 198 until

---

76 Ibid.
77 Johnston, supra n. 12, 231–232.
December 2002.\textsuperscript{79} Under the second package, the monthly subscription fee was reduced to HKD 166.80.\textsuperscript{80} The complaint was made by then-recent entrants into the subscription television market, Yes TV, Galaxy, and Pacific Digital Media. The second case (hereinafter Channel A case) took place in 2005 and concerned i-Cable’s offer of Channel A, a general entertainment channel combining the programmes of i-Cable’s various other channels, at HKD 30.\textsuperscript{81} While the BA made credible attempts at structured competition law analysis, the inadequacies in its decisions are plain to see. Three areas of notable problem are market definition, its analysis of predatory pricing claims, and causation.

4.1. MARKET DEFINITION

In the 2002 World Cup Package case, the BA had to tackle market definition in the Hong Kong television broadcasting market for the first time. Predictably, i-Cable argued that the relevant market consisted of both subscription television and free-to-air (FTA) television.\textsuperscript{82} The complainants argued that the relevant market was the narrower subscription television market, over which i-Cable was clearly dominant. At the time, i-Cable had an over 90\% market share. The BA concluded that the relevant market was that of subscription television services for the following reasons. First, the economics of subscription television is different from those of FTA television.\textsuperscript{83} The former is primarily reliant on subscription fees, whereas advertising is practically the sole source of revenue for the terrestrial broadcasters. Second, there is a substantial difference in the nature of the products. Subscription television services consist of multiple special-interest channels while FTA television offers ‘composite programming on a single channel or a few channels appealing to the widest possible audience’.\textsuperscript{84} The BA further cited to the decisional practices of the European Commission and the US Federal Trade Commission and reports authored by UK Office of Fair Trading and the US Federal Communications Commission, to substantiate its conclusion. Overseas experiences and decisions of other agencies in similar cases are clearly helpful. However, the economics of each market are different and Hong Kong consumers may see FTA television and subscription television as closer substitutes of each other than consumers in other jurisdictions. This is especially likely given the recent pedigree of subscription television in the city at the time, and the fact that there was only one established subscription television service provider in 2002. It is questionable whether the BA can define the local television broadcasting market simply by referring to overseas cases without considering data from the local market.

\textsuperscript{79} Ibid.
\textsuperscript{80} Ibid.
\textsuperscript{81} Broadcasting Authority, ‘Preliminary Enquiry Report on Complaint against Hong Kong Cable Television Limited about Provision of Channel A’, <http://www.hkba.hk/en/tv/competition/complaint_cases.html>, 2. Channel A was also offered as a package for HKD 70 per month.
\textsuperscript{82} 2002 World Cup Package case, supra n. 78, 3.
\textsuperscript{83} Ibid., 4.
\textsuperscript{84} Ibid.
The BA reached its conclusion on market definition without any reference to empirical data or market surveys. There is no reference to the Small but Significant Non-transitory Increase in Price (SSNIP) test or the need to determine how consumers react to price increases by the firms. These omissions are in fact not unique to this case. They are missing in all of the BA’s decisions. The SSNIP test would not have been difficult to apply in the 2002 World Cup Package case because i-Cable was effectively the only competitor in the subscription television market at the time. Evidence of consumers’ reaction to i-Cable’s past price increases would approximate the SSNIP test and provide highly probative evidence on the competitive relationship between i-Cable and the terrestrial broadcasters. i-Cable actually made an argument along those lines, referring to the fact that subscribers had in the past switched to FTA television in response to an increase in its subscription fees.85 The BA responded with a cryptic comment that ‘this is more of an indication that subscribers are relatively sensitive to price increases for pay TV (in economic terms, known as having a high price elasticity) rather than FTA TV and pay TV are close substitutes in terms of market definition’.86 What the BA failed to notice was that market definition and measurement of the price elasticity of demand for a product is simply two sides of the same coin.87 A product has high price elasticity because it has close substitutes, which means that that product is unlikely to constitute its own market. The fact that subscribers are price-sensitive admittedly need not mean that FTA television is part of the relevant market. Subscribers may substitute to other subscription television service providers in response to a price increase by the dominant provider. However, given that i-Cable was practically the only provider at the time, and consumers were unlikely to forego television altogether in the presence of the costless alternative of terrestrial broadcasting, price sensitivity on the part of i-Cable’s subscribers would support the inclusion of FTA television in the relevant market. In the end, the validity of i-Cable’s argument could only have been verified with empirical data.

The BA’s treatment of the market definition issue in the TVB-ATV Joint Acquisition of Sports Rights case left even more to be desired. At issue in the case was an agreement between TVB and ATV to bid jointly for the sublicense to rebroadcast the FIFA World Cup and Olympic Games in Hong Kong, after i-Cable had won the exclusive license to broadcast these events. The agreement prevented TVB and ATV from bidding against each other for the sublicense from i-Cable. This was a plain and simple cartel agreement and should have been treated as such. However, the BA argued that the alleged market allocation only took place in the upstream markets for the sublicenses, and not in the downstream television programme service market, which the Broadcasting Ordinance designates as the relevant market for sections 13 and 14. As such, the BA argued that it could only find a violation if there were direct or indirect effects in the downstream market.

85 Ibid., 5.
86 Ibid.
87 H. Hovenkamp, Federal Antitrust Policy, the Law of Competition and Its Practice, 3rd edn, 83–85. Market definition also needs to take into account supply side substitutability. However, the infrastructure-intensive nature of the broadcasting industry is such that supply substitution is likely to be difficult. Market definition will most likely focus on demand substitutability.
resulting from the cartel agreement in the upstream markets. While it noted that the market allocation agreement most likely 'reduce[d] the price paid for the rights in the upstream market, particularly over the longer term as a result of the reduction in the number of bidders to the detriment of the upstream rights holders', the BA proceeded to conclude that '[n]otwithstanding the impact on the prices for rights, ... there are no strong grounds for concluding that this will have any substantial impact on competition in the downstream market'.

The BA regrettably let its rigid adherence to the market designation in the Ordinance overshadow the substantive merits of the case. This was a simple market allocation case. The BA should have adjudged TVB and ATV to be in violation of section 13. While it is true that the Broadcasting Ordinance specifies television programme service as the relevant market, it does not compel the BA to take such a narrow view of market definition so that it is prevented from tackling a cartel agreement in the upstream markets. Given the closely interrelated nature of the upstream and the downstream markets, it would not have been a stretch for the BA to argue that the market designation in the Ordinance implicitly grants the BA jurisdiction over the upstream markets. Notwithstanding its narrow interpretation of the statutory language, there was in fact one other way for the BA to save itself from the predicament. The BA could have plausibly found that the cartel agreement had substantial effects in the downstream market and was hence illegal under section 13. The BA’s view was that given the designation of the relevant market in the Ordinance, conduct in the upstream market would only violate section 13 if it produced substantial competitive effects in the downstream market. The BA itself acknowledged that the cartel agreement likely resulted in lower sublicensing revenue for i-Cable. The most obvious competitive harm in the downstream market therefore would be reduced sublicensing revenue for i-Cable, which may have caused the operator to increase subscription fees to recoup the shortfall. One may also posit that the agreement may have led to breakdown in negotiations so that the rights would not have been sublicensed to either terrestrial broadcaster. This would have led to the denial of a highly desired output to consumers: free television coverage of the World Cup and the Olympic Games. Instead, the BA inexplicably redirected its focus on effects on the upstream markets, arguing that the agreement ‘may affect the bidding outcome for rights through increasing or strengthening the ability of FTA TV broadcasters to fund a bid’. It then proceeded to dismiss the likelihood of such effect on the grounds that ‘there is no evidence to show that the pooling of funds between ATV and TVB will remove or ease funding constraints which otherwise prevent either of them from out-bidding HKCTV’. Aside from the peculiar refocus on the upstream markets, the BA’s analysis misses the point. The cartel agreement was anti-competitive because it precluded

---

89 Ibid., 28–29.
90 Ibid., 28.
91 Ibid.
competition that would have otherwise taken place for the sublicensing rights, regardless of
whether the terrestrial broadcasters were subject to funding constraints. If the bidding
process had been allowed to run unfettered, the presence of such constraints would not
have made the terrestrial broadcasters’ bidding illegal. The BA’s double blunder in its
analysis allowed such a blatant cartel agreement to go unpunished. This makes a mockery of
the competition law regime under the Broadcasting Ordinance.

4.2. PREDATORY PRICING CLAIMS

If the BA’s treatment of market definition in these cases was flawed, its analysis of the
predatory pricing claims was even more deficient. In the 2002 World Cup Package case,
there was no effort at all to establish that there had been price cuts below some appropriate
measurement of costs. There was no discussion of what is the appropriate measurement of
costs, such as marginal costs or average variable costs, or long-run average incremental
costs, which are more often used in industries with high fixed costs and long-term
infrastructural investment needs. The only attempt to quantify the extent of the price cut
was by comparing it with past promotions by i-Cable. The BA concluded that the rate of
discount in the promotional packages at issue was 9% lower than previous discounts offered
by i-Cable, and therefore, the price cutting did not constitute illegal predatory pricing.92 If
the previous discounts had been below the appropriate measurement of costs, it was
certainly possible that the most recent discounts could still fall below those costs. There
was a more explicit discussion of costs in the Channel A case. In that case, the
BA acknowledged that the industry is characterized by high fixed costs and lower variable
costs.93 The BA seemed to have concluded that the price cutting was not predatory because
‘[a]s the programmes in Channel A are duplicates of those in HKCTV’s basic service, the
cost of Channel A would be correspondingly lower than that for an “ordinary” channel’.94
Given the cost structure of the industry, short-run variable costs, which in this case would
be close to zero, are not an appropriate measure of costs. The costs of repackaging existing
programming into a new channel are negligible. By the BA’s logic, price cutting would not
be predatory even if i-Cable were offering Channel A practically for free. In addition to the
lack of discussion of cost issues, the BA completely ignored in both cases the feasibility of
recoupment of short-run losses, which is a required element in a predatory pricing claim
according to the Guidelines.95 In this respect, the BA’s approach to predatory pricing is
more in line with the US approach, as laid down by the US Supreme Court in the *Brooke
Group* case.96 In that case, the Supreme Court expressly required a plaintiff to show

---

92 Ibid., 7.
93 Ibid.
94 Channel A case, supra n. 81, 10.
95 Paragraph 81 of the Guidelines requires a showing of whether predation is a feasible strategy in light of the
possibility of recoupment. Granted the Guidelines were only issued in 2007, whereas these two cases were decided in
2002 and 2006. It is possible that the BA only came to regard likelihood of recoupment of losses as an element of a
predatory pricing claim between the Channel A case and the issuance of the Guidelines.
dangerous likelihood of recoupment of losses to establish a predatory pricing claim. This requirement has been rejected by the Europea Court of Justice since.\footnote{Case C-333/94P, Tetra Pak International SA v. Commission [1996] ECR 1-5651, para. 44; Whish, supra n. 57, 735–736.} All in all, the BA’s analysis of these predatory pricing claims left much room for improvement.

4.3. Causation Standard

While the BA may have adopted a permissive approach to predatory pricing claims, its standard for causation has been quite stringent. In the 2002 World Cup Package case, the BA laid down a very stringent causation standard, requiring the complainant ‘to establish that they [the promotional offers] are a direct cause of competitive injury to the complainants.’\footnote{2002 World Cup Package case, supra n. 78, 6.} In the Channel A case, the BA buttressed its rejection of the predatory pricing claims by asserting that the i-Cable’s promotional package had had no competitive impact on competitors. Now TV and Galaxy had recorded ‘steady subscriber growth despite the operation of HKCTV’s package’.\footnote{Channel A case, supra n. 81, 11.} The BA has in fact deployed the same argument in a few other cases to establish the lack of competitive effects. For instance, in the Jewel in the Palace Exclusivity case, the BA argued that TVB’s exclusive supply of the popular programme ‘Jewel in the Palace’ did not produce competitive harm in the downstream market because ‘PCCW and HKCTV recorded strong subscriber growth despite the operation of exclusivity arrangements’.\footnote{Broadcasting Authority, ‘Preliminary Enquiry Report on Complaints Regarding Supply of a Drama Programme and Four Channels by Television Broadcasts Limited to Galaxy Satellite Broadcasting Limited’, <http://www.hkba.hk/en/tv/competition/complaint_cases.html>, 15–16. However, the BA did fine TVB and Galaxy over the same conduct that was deemed to be in breach of Galaxy’s licensing conditions. See Press Release, supra n. 62, 3–4.} The problem of this argument should be obvious. Continual subscriber growth does not demonstrate the absence of competitive harm; subscriber growth could have been higher without the alleged anti-competitive conduct. The interesting question is whether the BA would only be convinced of the presence of competitive harm if rivals’ subscriber numbers have fallen, or whether the BA would allow the competitors to show that subscriber growth was due to other factors, such as general expansion of the market. The former course would practically eviscerate the competition provisions in the Ordinance. It would mean that those provisions would be practically suspended so long as the market continued to grow across the board. Therefore, the BA must allow competitors to show that subscriber growth was due to other factors, and that such growth would have been even higher absent anti-competitive conduct.

The BA’s formulation of the causation standard in the 2002 World Cup Package case and its reasoning on competitive effects in the Channel A case together suggest that the complainant may be required to show that the anti-competitive conduct is the direct and sole cause of its competitive harm. This causation standard is practically impossible for any complainant to meet in a dynamic and complex market such as television broadcasting, or any market for that matter. It goes substantially beyond what the US Court of Appeals for
the District of Columbia (D.C.) Circuit required in the Microsoft case, which contains a detailed discussion of causation. The court rejected Microsoft’s argument that ‘plaintiff must present direct proof that a defendant’s continued monopoly power is precisely attributable to its anti-competitive conduct’. The court noted that Microsoft’s argument would have required the plaintiff to reconstruct the hypothetical market absent the anti-competitive conduct, which neither the plaintiff nor the court could do. It proceeded to adopt Professors Areeda and Hovenkamp’s formulation of causation that the anti-competitive conduct ‘reasonably appear[s] capable of making a significant contribution to . . . maintaining monopoly power’. In order not to eviscerate sections 13 and 14, the BA will need to reformulate a more lenient causation standard. While the BA need not adopt the Microsoft Court’s approach, it needs to recognize the substantial difference between a competition law case and a tort case, for example. The causation standard articulated by the BA is arguably more appropriate for a tort case, which usually involves a sequence of physical events. It is generally possible to isolate the direct cause of a certain result. A competition law case involves a confluence of events in a market consisting of hundreds if not thousands of actors. At any given point in time, multiple events and causes lead to changes in the competitive outcomes of price and output level. It is practically impossible to show that a particular conduct is solely or even directly responsible for some competitive outcome.

5. RECENT CONTROVERSIES IN THE TELEVISION BROADCASTING SECTOR

The BA’s existing decisional practices may give the impression that most competition problems in the television broadcasting sector revolve around i-Cable. These cases, however, do not present an accurate picture of the state of competition in the sector. In fact, the most widely known allegations of anti-competitive conduct have been directed at TVB, the dominant terrestrial broadcaster. In particular, TVB has long been accused of entering into exclusive contracts with singers and artists in Hong Kong, requiring them, as a condition of appearances on TVB, not to appear on shows broadcasted by other broadcasters. Moreover, artists on exclusive contracts with TVB are prohibited from being interviewed on rival TV channels in Cantonese, the native language of the vast majority of the population.

Despite considerable evidence and the government’s tacit acknowledgement of their existence, TVB has vehemently denied the existence of such contracts. It is a widely known fact in Hong Kong that almost no popular artists appear on ATV and the subscription channels. This has remained the case for at least two decades. It is also general knowledge that on the other channels, artists would only answer interview questions in

\[\text{101} \quad \text{United States v. Microsoft Corp., 253 F.3d 34 (D.C. Cir. 2001).}\]
\[\text{102} \quad \text{Ibid., 79.}\]
\[\text{103} \quad \text{Ibid.}\]
\[\text{104} \quad \text{Ibid.}\]
\[\text{105} \quad \text{Hong Kong Legislative Council, Information Technology and Broadcasting Affairs Committee Minutes of Special Meeting (2009), 13.}\]
Mandarin, despite the fact that everyone involved speaks Cantonese as his or her native language. Moreover, in a recent interview, a former TVB actor discloses that TVB requires film studios using a TVB actor in its films to make a formal commitment that the films will not be sold to ATV.106 This suggests that TVB may have a general policy of exclusivity with both its actors and contract artists. In addition, it is difficult to imagine why the government would have proposed an exemption for exclusive artist contracts in 2000 if the government had not believed that these contracts existed.

The TVB executive gave a revealing response at the Legislative Council hearing. Speaking at a Special Committee meeting on 30 June 2009, that executive argued that it is only commercially sensible for a television broadcaster not to invest resources in grooming an artist who is free to appear on rival channels. This suggests that even if there were no formal exclusive contracts, TVB probably has in place a policy of punishing artists for appearing on rival channels. Once this policy becomes known, it is not difficult to imagine that artists will meekly toe the line given the dominant position of TVB. Whether the exclusivity requirements are incorporated in the artist contracts cannot be ascertained without access to these contracts. It is possible that exclusivity is enforced only through informal punitive mechanisms that are known to all artists. Absent any formal or informal agreement between TVB and its artists on exclusivity, section 13 does not apply. Section 13 does not apply to conduct that is purely unilateral in nature, that is TVB’s alleged punitive mechanisms. However, section 14 would apply to such unilateral conduct given a finding of dominance on the part of TVB in a relevant market. The exclusivity requirements can be analysed as possible abuses of dominance. The subsequent analysis will rely on information available from the media and the interview the author conducted with an industry executive, and analyse the exclusivity requirements as possible abuses of dominance. It will further assume that TVB has at least implemented punitive mechanisms against artists for appearing on rival channels.

Before one can determine whether the exclusivity requirements constitute abuses of dominance, one must first define the relevant market and decide whether TVB occupies a dominant position in it, as required by the Guidelines. The market definition exercise in this case is trickier than in some of the previous BA cases, where the conduct only affected either the terrestrial broadcasters or the subscription service providers. For example, in the predatory pricing cases, i-Cable’s discounts only affected other subscription service providers. TVB and ATV were unaffected as their services are free to the viewers. Here, the exclusivity requirements have hampered the ability of rival channels, including ATV and i-Cable, to produce music programmes. Therefore, the BA would need to face squarely the issue of whether FTA and subscription television now form one integrated market. This issue can only be resolved with reference to market data and consumer surveys. If the BA finds FTA television to constitute its own market, then there is little doubt that TVB holds a dominant position. As mentioned in section 2, TVB has commanded around 80%

---

of the viewership in FTA television for years. Entry barriers to terrestrial broadcasting are very high given the need for spectrum, the substantial initial investments, the need to overcome entrenched consumer preferences for the existing channels, and so on. The fact that TVB has been able to maintain such high market share for so long suggests that market entry is likely to be very difficult.

If the BA defines one market covering both FTA and subscription television, the most accurate way to measure market share would be by viewership. The subscription service providers currently earn negligible advertising revenue, and the terrestrial broadcasters do not charge for their services. Therefore, neither subscription fees nor advertising revenue can be used for calculation of market shares. Here the difficulty is that viewership figures have traditionally only been compiled for TVB and ATV. There are no reliable viewership figures available for Now TV and i-Cable. According to an industry executive, i-Cable has an average viewership of about one point, as opposed to seven and a half points and two points of average full-day viewership for TVB and ATV, respectively. Given the similar subscriber numbers for i-Cable and Now TV, one may reasonably assume that their viewership numbers are similar. This means that Now TV can be assumed to have one point for average viewership as well, which would give TVB 65.2% of the overall television market. In other words, regardless of how the market is defined, TVB holds a dominant market share as measured by viewership. It has been mentioned that entry barriers to terrestrial broadcasting are high. Entry barriers to subscription television service are likely to be high as well given the need for a new entrant to build its own cable network or to negotiate access with the current network operators. Moreover, if the experience of i-Cable and Now TV is any indication, it will probably take years for this new entrant to break even, which means that the new entrant must have substantial financial resources to withstand the initial losses. All these factors combined should support the conclusion that TVB occupies a dominant position in the overall television market.

None of the BA’s existing decisional practices is directly applicable to the exclusivity requirements. Nor do the Guidelines shed much light on how the BA will analyse them. To assist in the analysis, this article will look to the jurisprudence of other jurisdictions, especially the United States, for guidance. Directly relevant cases are difficult to find even in other jurisdictions. The reasons are two-fold. First, denial of rivals’ access to human resources as an exclusionary conduct is relatively rare. Most of such cases pertain to intellectual property or physical infrastructure. Second, the few cases pertaining to human resources, which Professors Areeda and Hovenkamp describe as predatory hiring, have involved employees, and not contract artists, whose primary employers, if they can be characterized as employees at all, are record companies, and not the television broadcasters.

107 The reason that the focus will be on US case law is because the overarching economic philosophy of the city — that of laissez-faire — is probably more in line with the emphasis on free markets in US antitrust law. There are reasons to believe that enforcers in Hong Kong will find EU law overly interventionist. This is corroborated by the fact that the BA is yet to find a violation in the eight cases it has heard thus far.

108 The Court of Appeals for the Ninth Circuit noted in Universal Analytics that that case was the first s. 2 case involving predatory hiring. See Universal Analytics, Inc. v. MacNeal-Schwendler Corp., 914 F.2d 1256, 1258 (9th Cir. 1990).
Employees are almost always hired on an exclusive basis. They do not serve two employers at the same time. Artists, however, can and often do appear on multiple television channels in other jurisdictions. There are strong arguments for requiring an employee, such as a researcher, to work exclusively for one employer. Requiring a firm to share its research employees with a competitor will most definitely result in leaks of commercial secrets and undermine its research efforts. The argument is much less strong when applied to artists. There are much weaker justifications for a television channel to impose exclusivity requirements on artists.

Academic literature and the case law in the United States have generally taken a permissive view of predatory hiring. Professors Areeda and Hovenkamp note that acquisition of a rival’s employees is generally non-exclusionary. According to them, predatory hiring by a dominant firm only becomes exclusionary if it is ‘…”malicious” and totally without redeeming virtues’. More concretely, they assert that “[a]cquiring talent not to use it but to deny it to possible rivals is exclusionary. Such an arrangement has the same harmful tendency and the same lack of redeeming virtue as the promise of a non-employee that he will not compete with the monopolist’. This view is largely affirmed in the case law. US courts have generally held that if a monopolist hires an employee from a rival firm and puts the employee to use instead of leaving him idle, there is no violation of antitrust law. The importance of actual use of employees hired from a rival is emphasized by the US Court of Appeals for the Ninth Circuit, which asserted in *Universal Analytics* that it would have permitted a predatory hiring claim either ‘by showing the hiring was made with such predatory intent, that is, to harm the competition without helping the monopolist, or by showing a clear nonuse in fact’. The Ninth Circuit’s view is sound because non-use in fact suggests that the acquired employee’s value to a dominant firm lies not so much in what he can do for it but in denying that employee’s contributions to a rival.

The emphasis on non-use in fact highlights one similarity in the economic rationale behind predatory hiring and predatory pricing. A predatory pricing claim requires a showing of pricing below certain measures of cost. An analogous requirement in the context of a predatory hiring claim would be a showing that the employee’s economic value to the firm is lower than his cost, that is, his salary, such that the firm’s hiring decision results in a loss. However, the economic value of an employee is very difficult to determine. Given the importance of an employee’s freedom of contract and freedom to offer his labour to whomever he pleases, a predatory hiring claim should be formulated in

---


110 Ibid., 205.

111 Ibid.

112 *Universal Analytics, Inc. v. MacNeal-Schwendler Corp.*, 707 F. Supp. 1170 (C.D. Cal. 1989), hiring of five key employees from rival who were subsequently deployed in company was not exclusionary; *Taylor Publishing Co. v. Jostens, Inc.*, 216 F.3d 463 (5th Cir. 2000), hiring away and actual use of employees not a s. 2 violation; *American Professional Testing Service v. Hamount, Bice, Jovanovich Legal & Professional Publishing, Inc.*, 108 F.3d 1147 (9th Cir. 1997), hiring of one key employee insufficient to establish s. 2 violation when defendant actually deployed employee instead of leaving him idle; *Midwest Radio Co. v. Forum Publishing Co.*, 942 F.2d 1294, 1297 (8th Cir. 1991), emphasizing importance of defendant’s actual use of employee to negate s. 2 violation.

113 *Universal Analytics, supra* n. 108, 1258.
such a way that false positives are minimized. This means that such a claim should only be allowed if there is clear and convincing evidence that the hiring of the employee is loss-making, which would be unequivocally true if the employee was left idle and redounding no useful value to the firm. However, a plaintiff should not be required to show complete non-use. Although most of the cases cited above seem to require such a showing, such a requirement would open the door to easy circumvention. A dominant firm keen to avoid a predatory hiring claim may do so by creating a ceremonial position for an acquired employee. The position may have little actual substance, but there is, strictly speaking, an absence of complete non-use. One may understandably feel uneasy about the implication of allowing the courts to inquire into the substance of a position. This may indeed set the courts down on the proverbial ‘slippery slope’. However, determining whether a position is entirely devoid of substance should be within the courts’ fact-finding abilities. In making this determination, courts should err on the side of under-inclusion. If there is any plausible evidence that the position carries some substance, the courts should not find non-use in fact.

The Ninth Circuit’s emphasis on actual use of employee is consistent with the US Supreme Court’s reasoning in the American Tobacco case, where the Supreme Court held that acquisition of production plants not for the purpose of utilizing them, but in order to deny rivals’ access to them, was exclusionary.114 In Wichita Clinic, the District of Kansas Court added an extra circumstance under which a monopolist’s hiring of a rival’s employees may be exclusionary: offering that employee excessive salaries, even if the employee was put to actual use.115 This case would allow predatory hiring to be established absent proof of non-use. It would be sufficient to show that the defendant offered excessive salaries. However, what constitute excessive salaries may be difficult to determine, especially for an employee in possession of unique skills or experiences. Therefore, a better view is probably that an offer of unusually high salary is one of the factors to consider in determining the presence of predatory intent. Such an offer, without other evidence of predatory intent, should not suffice to sustain a predatory hiring claim.

Incorporating these principles into section 14, the legality of the exclusivity requirements would hinge on whether TVB has left these artists idle. However, it is important to bear in mind an important difference between a regular employee and a contract artist. A regular employee is usually utilized through assignment to a particular position. A contract artist generally does not work for a television channel on a continual basis. He can be utilized by simply putting him on one show. This means that it would be easier for a dominant firm to circumvent the requirement of non-use in fact with respect to contract artists. With a regular employee, the firm would still need to appoint him to a position and give him some proper responsibilities on a continual basis. With a contract

114 United States v. American Tobacco Co., 221 US 106, 183 (1911), s. 2 violation is supported by ‘persistent expenditure of millions upon millions of dollars in buying out plants, not for the purpose of utilizing them, but in order to close them up and render them useless for the purposes of trade’.
115 Wichita Clinic v. Columbia/HCA Healthcare Corp., 1997 WL 225,966, 1997-1 Trade Cas. 71, 829 (D. Kan.).
artist, the broadcaster may simply give him one performance. Therefore, in determining the legality of the exclusivity requirements, the BA should not be satisfied by a mere showing that the artist has been put on one or very few shows. If there is a persistent pattern of minimal use year after year, the BA should conclude that there is non-use in fact. Moreover, the BA should consider whether the salaries paid to such one-show artists are excessive as compared to the salaries paid to comparable artists. Excessive salaries may help to establish the presence of a predatory intent. In the context of contract artists subject to exclusivity, the excessive salaries take on additional importance. One may characterize the premium in the excessive salaries as compensation to these artists for the income foregone by agreeing not to appear on rival television channels.  

There are in fact persuasive reasons that the BA should go beyond the US cases and adopt a more stringent approach to the exclusivity requirements imposed by TVB. First, in all of the US cases discussed above, the number of employees at issue was small. For example, in *Universal Analytics*, the defendant poached five key employees from the plaintiff. In *American Professional Testing*, at issue was one star law professor. In the case of TVB, there is evidence that the exclusivity requirements have resulted in what is essentially a wholesale denial of artists to ATV and other channels. Given the size of the US economy and the nature of employment at issue, it would have been impossible for the defendant dominant firms in those cases to achieve complete foreclosure of potential employees. With regular employees, there is a limit to how many of them even a dominant firm can take on to deny rivals’ access to them. Employees have to be given a position within the firm somehow. Financial resources permitting, there is much greater room for a dominant broadcaster to absorb contract artists and deny rivals’ access to them. TVB has abundant financial resources at its disposal. Moreover, the much smaller size of the Hong Kong economy means that complete foreclosure of a key input in production can be much more easily achieved than in the United States. This is exacerbated by the fact that Hong Kong speaks a different language from the other major entertainment markets in East Asia, such as Japan (Japanese), South Korea (Korean), Taiwan and China (both Mandarin). The market for pop music in Hong Kong is very much local in scope. Local audience has demonstrated a distinct preference for music in the Cantonese language. It would thus be very difficult for rival television channels to turn to overseas markets for artists. Second, the exclusivity requirements have been in operation for years. ATV and the subscription television channels have had difficulty in procuring artists for their musical shows for a long time. ATV in fact has very few musical shows on offer. i-Cable and Now TV do not offer much by way of local music programmes. Most of their music programmes broadcast non-local music. The lack of viable music programmes has clearly impeded rivals’ ability to compete with TVB and inflicted competitive harm in the form of lower viewership. In the presence of evidence of palpable competitive harm, the BA should be more ready to deem these exclusivity requirements violations of section 14.

---

116 This argument does not apply to regular employees because they are almost always hired on an exclusive basis. There is no issue of them foregoing income, which they would have earned by working for a rival firm concurrently.
It is important to reiterate here the importance of adopting an appropriate causation standard. Based on its existing decisional practices, the BA would require rival TV channels to show that the exclusive requirements have directly resulted in a drop in viewership or subscriber number. As argued earlier, it would be close to impossible to show such direct causation, given the high fluctuations in viewership number and the constant growth of subscription base for i-Cable and Now TV in recent years. In fact, the challenge here would be even greater than in previous cases. The rival channels would essentially be required to show that its ratings or subscription base would have been higher had they been able to procure some artists for their music programmes. This is exactly the kind of hypothetical market that the D.C. Circuit said in the *Microsoft* case that neither the plaintiff nor the court can reconstruct. A more appropriate and realistic causation standard would be to require the rival television channels to show that inability to procure artists has hampered their ability to offer viable music programmes. Given the popularity of music programmes with the general public, the BA should then assume that the lack of viable music programmes has resulted in competitive harm in the form of loss of viewership or subscribers.

6. CONCLUSION

Hong Kong has made an initial attempt at competition law enforcement through its sectoral regimes in the television broadcasting and telecommunications sectors. While these two regimes have provided the city some valuable experiences, they also expose the limitations of the sectoral approach. First, as vividly demonstrated in the Joint Acquisition of Sports Rights case, this approach has led to an embarrassing situation where a blatant cartel agreement escaped punishment because of some complexity in market definition. Although this is partly of the BA’s own making, the BA need not have adopted such a narrow view of the relevant market under the statute, this situation would have been avoided altogether if the competition provisions applied cross-sector as opposed to only in the television programme service market. In fact, this was not the first time that limitations of the sectoral approach were on display. In the telecommunications sector, the regulator was forced to let go of a tying case between an internet service provider and an estate management company on the grounds that the regulator did not have jurisdiction over the latter.

One further drawback of the sectoral approach is that it impedes the acquisition of expertise. Despite the importance of these two sectors, the small size of Hong Kong’s economy means that there are only a small number of firms in these sectors. The number of competition cases arising under these sectoral regimes is necessarily small. The BA itself has decided eight cases in the last nine years. It is thus not cost-effective for the two regulators to develop substantial in-house expertise on competition law. The BA, for example, usually hires an outside economic consulting firm to assist it in adjudicating cases. One possible solution to this problem is to combine the competition law enforcement capabilities of the BA and the telecom regulator. However, the sectoral approach means that the competition law regimes governing these two sectors have always been viewed as separate. It is perhaps inevitable that this approach will continue to hinder the emergence of viable infrastructure
for competition law enforcement in Hong Kong. Thankfully, as of the time of writing, the Hong Kong government is preparing the draft bill for a cross-sector competition law for the city. It is hoped that once the cross-sector law has been enacted, more investment will be made to create an enforcement agency with the requisite expertise so that the quality of competition law enforcement in Hong Kong can be further improved.

APPENDIX A

COMPETITION PROVISIONS IN THE BROADCASTING ORDINANCE (CAP. 562)

13. **Prohibition on Anti-competitive Conduct**

(1) Subject to subsections (4) and (5), a licensee shall not engage in conduct that, in the opinion of the Broadcasting Authority, has the purpose or effect of preventing, distorting, or substantially restricting competition in a television programme service market.

(2) The Broadcasting Authority may consider conduct to fall within subsection (1) as including, but not limited to

(a) direct or indirect agreements to fix the price in a television programme service market;

(b) conduct preventing or restricting the supply of goods or services to competitors;

(c) direct or indirect agreements between licensees to share any television programme service market between them on agreed geographic or customer lines;

(d) limiting or controlling production, markets, technical development, or investment;

(e) applying dissimilar conditions to equivalent agreements with other trading parties, thereby placing them at a competitive disadvantage;

(f) making the conclusion of agreements subject to acceptance by the other parties of supplementary obligations, which, by their nature or according to commercial usage, have no connection with the subject of such agreements.

(3) Subject to subsection (4), a provision in an agreement is void in so far as it provides for or permits, whether directly or indirectly, conduct that contravenes subsection (1).

(4) The Broadcasting Authority may

(a) on an application made to it in the specified form by a licensee;

(b) on a prescribed ground; and

(c) by notice in writing served on the licensee, exempt conduct specified in the application from subsection (1) subject to such conditions as the Broadcasting Authority thinks fit specified in the notice.
Subsection (1) shall not apply to
(a) any restriction imposed on the inclusion in a television programme service of a television programme produced wholly or substantially by the licensee of the service; or
(b) any prescribed restriction.

For the avoidance of doubt, it is hereby declared that nothing in this section shall prejudice the existence of any rights arising from the operation of the law relating to copyright or trademarks.

14. **Prohibition on Abuse of Dominance**

(1) A licensee in a dominant position in a television programme service market shall not abuse its position.

(2) A licensee is in a dominant position when, in the opinion of the Broadcasting Authority, it is able to act without significant competitive restraint from its competitors and customers.

(3) In considering whether a licensee is dominant, the Broadcasting Authority shall have regard to relevant matters including, but not limited to
(a) the market share of the licensee;
(b) the licensee’s power to make pricing and other decisions;
(c) any barriers to entry to competitors into the relevant television programme service market;
(d) such other relevant matters as may be stipulated in guidelines concerning the test of dominance issued under section 4 by the Broadcasting Authority in consultation with the licensees in the relevant television programme service market.

(4) A licensee who is in a dominant position is deemed to have abused its position if, in the opinion of the Broadcasting Authority, the licensee has engaged in conduct that has the purpose or effect of preventing, distorting, or substantially restricting competition in a television programme service market.

(5) The Broadcasting Authority may consider conduct to fall within the conduct mentioned in subsection (4) as including, but not limited to
(a) predatory pricing;
(b) price discrimination, except to the extent that the discrimination only makes reasonable allowance for differences in the costs or likely costs of supplying the service or other matter;
(c) making the conclusion of agreements subject to acceptance by other parties of terms or conditions which are harsh or unrelated to the subject of the agreement;
(d) discrimination in the supply of services to competitors.
15. **Provisions Supplementary to Sections 13 and 14**

(1) The conduct of an associate of a licensee, or the position of the associate in a television programme service market, may be considered for the purposes of section 13 or 14.

(2) A person sustaining loss or damage from a breach of section 13(1) or 14(1), or a breach of a license condition, determination or direction relating to that section, may bring an action for damages, an injunction or other appropriate remedy, order or relief against the licensee who is in breach.

(3) No action may be brought under subsection (2) more than three years after
   (a) the commission of the breach concerned referred to in that subsection; or
   (b) the imposition under section 28 of a penalty in relation to the breach, whichever is the later.

(4) For the avoidance of doubt, it is hereby declared that a breach of section 13(1) or 14(1) occurs when the Broadcasting Authority forms the opinion referred to in section 13(1) or 14(4), respectively.

16. **Notice to Licensee to Cease Certain Conduct**

The Broadcasting Authority may, by notice in writing served on a licensee

   (a) require the licensee to cease and desist on and after a date specified in the notice from conduct specified in the notice as conduct that the Broadcasting Authority states in the notice that it is of the opinion that it contravenes section 13(1) or 14(1);

   (b) direct the licensee to take such steps as are specified in the notice, and within the period specified in the notice, as the Broadcasting Authority considers appropriate for the purpose of securing, or assisting the securing of, the licensee’s compliance with that section.
Guide to Authors

(1) Proposed contributions are invited and received on the understanding that they are final, and not preliminary drafts. They must not have been published or submitted for publication elsewhere and a statement to this effect should be included with the text submitted for publication. Only articles in English will be considered for publication.

(2) In general, the most acceptable length for articles is between 3,000-8,000 words. Under no circumstances will articles exceed 12,000 words.

(3) World Competition is a refereed journal. Every manuscript is submitted for peer review for the purpose of maintaining the standards of the journal.

(4) Due to strict production schedules it is not possible to amend texts after acceptance or send proofs to authors for correction. The Editors reserve the right to make alterations as to style, grammar, and punctuation.

(5) Articles which are submitted for publication must be accompanied by a 200-word abstract giving a brief description of the content. This abstract will be published online.

(6) Articles should be provided in an electronic form (preferably in Microsoft Word or Word Perfect).

(7) Higher Degrees, distinctions and the correct title of the author’s present position should appear in a footnote marked by an asterisk after the author’s name on the opening page of the article. General information about an article or acknowledgement for any assistance in its preparation may be added to this footnote.

(8) Special attention should be paid to quotations, footnotes, and references. All citations and quotations must be verified before submission of the manuscript. The accuracy of the contribution is the responsibility of the author. Contributors should be particularly cautious of material which could be considered defamatory or litigious.

(9) Footnotes should be numbered consecutively (so that if any footnote is added or deleted, all affected notes should be renumbered) and printed at the bottom of the next page after the text. Authors are encouraged to make reference to articles on the same or related topics previously published in World Competition.

(10) Articles should be cited as follows: author’s name, title of article in quotation marks, journal reference (a), date of publication (b), and page numbers (c). For example: John L. Murray, ‘The Competition Authority, the EC Treaty, and Community Competition Law’, World Competition (2002) 21-47.

(11) Articles should be submitted to the Editor, competition@twobirds.com, before 10 September 2003.

(12) Articles should be submitted as an electronic file (in Microsoft Word format). The text should be double-spaced, and font size 12. The Editors reserve the right to make alterations as to style, grammar, and punctuation. All manuscript pages should be numbered consecutively with page numbers appearing at the top right of the page.

(13) Tables should be self-explanatory and their content should not be repeated in the text. Do not tabulate unnecessarily. Tables should be numbered and may include a title. Column headings should be kept as brief as possible and descriptive text in narrow columns should be avoided.

(14) General style rules are:

(a) Abbreviations and acronyms should be spelled out in the first instance with the abbreviation following in parentheses.


(c) Case names should be italicized, e.g., Case C-286/88, Falcó v. Comune di Persio, (1990) ECR 1791. A reference to the relevant paragraph(s) in the judgment or decision should be provided.

(d) Use single quotation marks ("), with double quotation marks within single.

(e) Extracts should follow the original for spelling, punctuation and capitalization.

(f) All punctuation marks should appear outside quotation marks unless the quotation includes material which could be considered defamatory or litigious.

(g) When using numbers, spell out zero to ninety-nine and use numerals for the rest, e.g., 120 or 1,200.

(h) Heading levels should be clearly indicated. (i) Oxford spelling is preferred, unless the whole article comes from an American author or the material is an extract from an American case or document.

(15) Contributions should be posted to José Rivas, Bird & Bird, Avenue d’Auderghem 22-28 box 9, 1040 Brussels, Belgium or sent electronically to jose.rivas@twobirds.com or world.competition@twobirds.com.

(16) Manuscripts submitted for publication must be accompanied by a statement that they are original contributions and that they have not been published or submitted for publication elsewhere.

(17) All correspondence should be addressed to:

Bird & Bird, Avenue d’Auderghem 22-28 box 9, 1040 Brussels, Belgium.
Tel: +32 (0) 2 282 6022 Fax +32 (0) 2 282 6011
E-mail: world.competition@twobirds.com


ISSN 1011-4548 Mode of citation: 33 W.Comp. 2