

*Regulation of radio broadcasting services  
in selected places*

*5 June 2008*

Prepared by

**Thomas WONG**

**Research and Library Services Division  
Legislative Council Secretariat**

**5th Floor, Citibank Tower, 3 Garden Road, Central, Hong Kong**

**Telephone : (852) 2869 9621**

**Facsimile : (852) 2509 9268**

**Website : <http://www.legco.gov.hk>**

**E-mail : [library@legco.gov.hk](mailto:library@legco.gov.hk)**

# Contents

	<i>Page</i>
<b>Executive Summary</b>	
<b>Chapter 1 – Introduction</b>	<b>1</b>
Background	1
Scope of research	1
Selected overseas places	2
Research method	3
<b>Chapter 2 – Canada</b>	<b>4</b>
Major types of radio broadcasting services	4
Government's radio broadcasting policy	4
Regulatory authority of radio broadcasting services	5
<i>Appointment</i>	5
<i>Statutory duties and powers</i>	5
<i>Accountability</i>	6
Allocation of broadcasting spectrum	7
Licensing of radio broadcasting services	8
<i>Criteria for assessing applications</i>	8
<i>Public participation in the licensing process</i>	9
<i>Appeal mechanism and public petition</i>	9
Broadcasting licence fees	10
<i>Statutory fee-setting criteria</i>	10
<i>Public consultation</i>	10
<i>Licence fee calculation</i>	10
Efforts to promote public access channels	12
<i>Licensing</i>	13
Development of digital radio broadcasting	14
<i>Implementation strategy</i>	14
<i>Problems</i>	15
<i>Revised digital radio broadcasting policy</i>	15

<b>Chapter 3 – United Kingdom</b>	<b>16</b>
Major types of radio broadcasting services	16
Government's radio broadcasting policy	16
Regulatory authority of radio broadcasting services	17
<i>Appointment</i>	17
<i>Statutory duties and powers</i>	18
<i>Accountability</i>	19
Allocation of broadcasting spectrum	19
Licensing of radio broadcasting services	20
<i>Cash bids for national analogue commercial radio licences</i>	21
<i>Open competition for local analogue commercial radio licences</i>	21
Broadcasting licence fees	23
<i>Fees for national and local commercial analogue radio licences</i>	23
<i>Fees for all other types of radio licences</i>	23
Efforts to promote public access channels	24
<i>Licensing</i>	25
<i>Financial support to community radio</i>	27
Development of digital radio broadcasting	28
<i>Licensing of DAB commercial radio multiplex</i>	28
<i>Factors contributing to the growth of digital radio</i>	29
<b>Chapter 4 – Australia</b>	<b>30</b>
Major types of radio broadcasting services	30
Government's radio broadcasting policy	30
Regulatory authority of radio broadcasting services	31
<i>Appointment</i>	31
<i>Statutory functions</i>	31
<i>Accountability</i>	32
Allocation of broadcasting spectrum	32
Licensing of radio broadcasting services	33
<i>Price-based allocation of commercial radio broadcasting licences</i>	34
Broadcasting licence fees	34
Efforts to promote public access channels	34
<i>Licensing</i>	35
<i>Guidance on operation and programming</i>	37
<i>Financial support</i>	37
Development of digital radio broadcasting	38
<i>Implementation strategy</i>	38

<b>Chapter 5 – United States</b>	<b>39</b>
Major types of radio broadcasting services	39
Government's radio broadcasting policy	39
Regulatory authority of radio broadcasting services	40
<i>Appointment</i>	40
<i>Statutory duties and powers</i>	40
<i>Accountability</i>	41
Allocation of broadcasting spectrum	41
Licensing of radio broadcasting services	41
<i>Point system for non-commercial educational radio licences</i>	41
<i>Auction for commercial radio licences</i>	43
<i>Public participation in the licensing process</i>	43
Broadcasting licence fees	44
Efforts to promote public access channels	44
<i>Licensing</i>	45
Development of digital radio broadcasting	45
<i>Implementation strategy</i>	46
<b>Chapter 6 – Analysis</b>	<b>47</b>
Introduction	47
Government's radio broadcasting policy	47
<i>Radio broadcasting policies set out in legislation</i>	47
<i>Policies to enhance diversity of radio broadcasting services</i>	48
Licensing of radio broadcasting services	49
<i>Authority responsible for granting licences</i>	49
<i>Methods for determining the granting of licences</i>	49
<i>Licensing criteria</i>	50
Public participation in the licensing process	51
Broadcasting licence fees	52
Development of community radio	53
<i>Statutory status</i>	53
<i>Measures to promote diversity of community radio</i>	53
<i>Financial support for community radio</i>	54
Development of digital radio broadcasting	55
<b>Appendix</b>	<b>56</b>
<b>References</b>	<b>63</b>

---

*Research reports are compiled for Members and Committees of the Legislative Council. They are not legal or other professional advice and shall not be relied on as such. Research reports are subject to copyright owned by the Legislative Council Commission (the Commission). The Commission permits accurate reproduction of the research reports for non-commercial use in a manner not adversely affecting the Legislative Council, provided that acknowledgement is made stating the Research and Library Services Division of the Legislative Council Secretariat as the source and one copy of the reproduction is sent to the Legislative Council Library.*

## **Executive Summary**

1. This report studies the regulation of radio broadcasting services other than public service broadcasting in Canada, the United Kingdom (UK), Australia and the United States (US). It focuses on the following aspects: the government's radio broadcasting policy; the regulatory authority of radio broadcasting services; the allocation of broadcasting spectrum; the licensing of radio broadcasting services; broadcasting licence fees; efforts to promote public access channels; and the development of digital radio broadcasting (DRB).
2. In Canada, the federal government's broadcasting policy, which is mainly set out in the Broadcasting Act 1991, requires radio broadcasting services to comprise not only public and private elements but also community elements, and to enrich the cultural, political, social and economic fabric of Canada. The federal government's Industry Canada is responsible for allocating broadcasting spectrum, while the statutory Canadian Radio-television and Telecommunications Commission (CRTC) is responsible for licensing radio broadcasting services. Before deciding whether to grant a licence, CRTC must hold public hearings on the applications for the licence and assess those applications against certain statutory criteria relating to Canadian ownership, financing, technical capacity and programming requirements. CRTC may require an applicant to conduct a market study on the demand for the proposed service and its possible impact on the market. Members of the public may petition the Governor in Council to urge CRTC to hold a hearing to reconsider its decision to issue a licence. Licensees are required to pay annual broadcasting licence fees to CRTC, with such fees being calculated on the basis of cost recovery. Since 1992, CRTC has promoted community radio, providing opportunities for members of the community to manage and operate radio services, and offering diverse programming that reflects the various needs and interests of the community. CRTC has launched DRB since 1995 but has revised its DRB policy, owing to the slowing down of DRB rollout in recent years.

3. In the UK, while the government's broadcasting policy is not spelt out in the enabling legislation, the responsible authority has formulated a strategic policy framework to advance its broadcasting objectives, which include sustaining citizenship and civil society and promoting social gain by fostering the plurality of radio broadcasting and the community radio sector. The statutory Office of Communications (Ofcom) is responsible for allocating broadcasting spectrum and licensing radio broadcasting services. Ofcom grants national analogue commercial radio licences through a cash bid process. It grants local analogue commercial radio licences and community licences through an open competition in which it must assess applications for such licences against certain statutory criteria relating to the applicants' ability to maintain the proposed service and to cater for the tastes and interests of target listeners, the broadening of choices of programmes and evidence of demand for the proposed service. Licensees are required to pay annual broadcasting licence fees to Ofcom, with such fees being calculated on the basis of cost recovery. Since 2003, Ofcom has promoted community radio, which is intended to be clearly distinct from commercial and public broadcasters. Ofcom has sought to preserve the independence and diversity of community radio by denying any application which proposes to receive from any one source more than 50% of its income in a financial year to provide the proposed service. Ofcom has launched DRB since 1995. In recent years, the growth in digital radio listeners has been significant.
  
4. In Australia, the federal government's broadcasting policy, which is mainly set out in the Broadcasting Services Act 1992, encourages commercial and community broadcasting service providers to be responsive to the need for an appropriate coverage of matters of local significance. The government is also required by legislation to make adequate provision of broadcasting spectrum for use by community services. The statutory Australian Communications and Media Authority (ACMA) is responsible for allocating broadcasting spectrum and licensing radio broadcasting services. ACMA grants commercial radio licences under a price-based licence allocation exercise. It grants long-term community radio licences on a merit basis by assessing an applicant against certain statutory criteria, including whether the applicant would meet the existing and future needs of the community to be served and the nature and diversity of other broadcasting services available within that community. Licensees are required to pay annual broadcasting licence fees to ACMA, with such fees being calculated on the basis of cost recovery. The federal government has allowed the operation of community radio since 1972. To promote the development of community radio, ACMA may grant 12-month temporary community radio licences (instead of five-year long-term licences) to aspiring broadcasters wishing to build community support for long-term community radio. The federal government has set 1 January 2009 as the official launch date for DRB. Nevertheless, DRB will only be supplementary to existing analogue radio services for a considerable period and may never be a complete replacement.

5. In the US, the purposes of the federal broadcasting policy, which are set out in the Communications Act of 1934 as amended, require the statutory Federal Communications Commission (FCC) to promote competition and diversity, and to offer meaningful choices to consumers. FCC is responsible for allocating broadcasting spectrum and licensing radio broadcasting services. It grants commercial radio licences by auction, and uses a point system to grant non-commercial educational radio licences to the applicants who best meet certain criteria relating to diversity of ownership, the coverage of area and population and the link with the community to be served. Any applicant for a licence must maintain a file available for public inspection. The file must include copies of the application filed with FCC; citizen agreements, if any, made between the applicant and local listeners on programming, employment or other issues of community concern; and ownership reports including interests held by the applicant in other radio stations. Licensees are required to pay annual regulatory fees to FCC, with such fees being calculated on the basis of cost recovery. Since 2000, FCC has promoted Low Power FM (LPFM) radio services to encourage diverse voices on the nation's airwaves and to create opportunities for new entrants in broadcasting. To preserve the independence and diversity of LPFM radio, existing broadcasters, cable television system operators or daily newspaper publishers are not eligible for LPFM licences. FCC launched DRB in 2002. It has advocated an interim and voluntary approach for analogue service licensees to commence DRB, instead of imposing a mandatory conversion schedule for such licensees.
6. The Analysis chapter compares the main features of the regulation of radio broadcasting services in the four selected places and Hong Kong.

# **Regulation of radio broadcasting services in selected places**

## **Chapter 1 – Introduction**

### **1.1 Background**

1.1.1 The Panel on Information Technology and Broadcasting, at its meeting on 29 January 2008, requested the Research and Library Services Division (RLSD) to conduct a research on regulation of radio broadcasting services in overseas places to facilitate Members' deliberation on the situation in Hong Kong.

### **1.2 Scope of research**

1.2.1 This study focuses on the following aspects of regulation of radio broadcasting services in selected places:

- (a) government's radio broadcasting policy;
- (b) regulatory authority of radio broadcasting services;
- (c) allocation of broadcasting spectrum;
- (d) licensing of radio broadcasting services;
- (e) broadcasting licence fees;
- (f) efforts to promote public access channels; and
- (g) development of digital radio broadcasting (DRB).

1.2.2 This study does not cover regulation of public service broadcasting, which was the theme of the 2006 RLSD research report entitled "Public Service Broadcasting in Selected Places".



### **1.3 Selected overseas places**

1.3.1 This study covers the following four places, each of which has certain distinctive features in regulating radio broadcasting services:

- (a) Canada;
- (b) the United Kingdom (UK);
- (c) Australia; and
- (d) the United States (US).

1.3.2 In Canada, the statutory Canadian Radio-television and Telecommunications Commission (CRTC) is responsible for regulating radio broadcasting services and issuing licences for such services. CRTC reports to the Parliament of Canada through the responsible Minister. It must hold public hearings for the issue of licences and the establishment of performance objectives for any licensee. Application for a licence must meet certain minimum criteria in ownership, financial capacity, technical capacity and programming requirements. The applicant may be required to conduct a market study to confirm the demand for the proposed service, show how the service would increase diversity in the market, and address the effect the service would have on existing broadcasters.

1.3.3 In the UK, the statutory Office of Communications (Ofcom) is responsible for licensing and regulating radio broadcasting services. In recent years, Ofcom has introduced community radio licences for small-scale, not-for-profit radio stations operating for the good of members of the public or particular communities. The legislation requires that a community radio station should be funded from multiple sources, with 50% of its funding being disallowed to come from any single source. Meanwhile, the UK government is reviewing its regulatory framework for commercial and community radio services to recognize the transition from analogue to digital broadcasting.

1.3.4 In Australia, the statutory Australian Communications and Media Authority is responsible for granting licences for community radio on the basis of the applicants' comparative merits in accordance with certain statutory criteria. In 2007, legislation was enacted to facilitate the introduction of DRB by 1 January 2009.

1.3.5 In the US, all spectrum for radio broadcasting services is assigned by the statutory Federal Communications Commission (FCC) through auction or a point system, except those allocated to specified uses such as public broadcasting and federal services. FCC is an independent US government agency directly responsible to Congress, with its Commissioners being appointed by the US President and confirmed by the Senate. The legislation allows members of the public to express their views to FCC on applications for radio broadcasting licences.

## **1.4 Research method**

1.4.1 This study adopts a desk research method, which involves literature review, documentation analysis, Internet research and correspondence with the relevant authorities.

## **Chapter 2 – Canada**

### **2.1 Major types of radio broadcasting services**

2.1.1 Canada has various types of radio broadcasting services other than public service broadcasting. By the end of December 2006, such services included:<sup>1</sup>

- (a) 742 private commercial radio services, including 184 AM stations, 465 FM stations and 58 stand-alone and transitional digital radio stations; and
- (b) 105 community radio services.

### **2.2 Government's radio broadcasting policy**

2.2.1 In Canada, all radio broadcasting services are governed by the federal government's broadcasting policy set out in the Broadcasting Act 1991. Radio broadcasting services must:<sup>2</sup>

- (a) comprise "public, private and community elements";
- (b) serve to safeguard, enrich and strengthen the cultural, political, social and economic fabric of Canada;
- (c) encourage the development of Canadian expression by providing a wide range of programming that reflects Canadian attitudes, opinions, ideas, values and artistic creativity;
- (d) serve the needs and interests, and reflect the circumstances and aspirations, of Canadian men, women and children, including equal rights, the linguistic duality (i.e. the use of both English and French as official languages) and multicultural and multiracial nature of Canadian society and the special place of aboriginal peoples within the society;

---

<sup>1</sup> Canadian Radio-television and Telecommunications Commission (2007) p.7.

<sup>2</sup> Section 3(1), Broadcasting Act 1991.

---

---

- (e) provide programming that should (i) be "varied and comprehensive" and drawn from local, regional, national and international sources; (ii) include educational and community programmes; (iii) provide a reasonable opportunity for the public to be exposed to the expression of different views on matters of public concern; and (iv) include a "significant contribution" from the Canadian independent production sector; and
- (f) be readily adaptable to scientific and technological change.

### **2.3 Regulatory authority of radio broadcasting services**

2.3.1 The Canadian Radio-television and Telecommunications Commission (CRTC), established under the Canadian Radio-television and Telecommunications Commission Act, is empowered by the Broadcasting Act 1991 to regulate all aspects of the Canadian broadcasting system, including radio broadcasting services, with a view to implementing the statutory broadcasting policy mentioned in **paragraph 2.2.1**.

#### Appointment

2.3.2 CRTC comprises not more than 13 full-time members and not more than six part-time members appointed by the Governor in Council.<sup>3</sup> One of the full-time members is designated by the Governor in Council as the chair of CRTC.<sup>4</sup>

#### Statutory duties and powers

2.3.3 CRTC's statutory duties and powers include:<sup>5</sup>

- (a) issuing, renewing and amending radio broadcasting licences, subject to certain directions from the Governor in Council, and suspending or revoking such licences;

---

<sup>3</sup> Section 3(1), Canadian Radio-television and Telecommunications Commission Act. The Governor in Council means the Governor General of Canada, the head of state, acting on the advice of the federal Cabinet led by the Prime Minister, the head of government. A CRTC member must be a Canadian citizen ordinarily resident in Canada, and "directly or indirectly, as owner, shareholder, director, officer, partner or otherwise", must not be "engaged in a telecommunications undertaking" or must not have "any pecuniary or proprietary interest in a telecommunications undertaking or in the manufacture or distribution of telecommunications apparatus, except where the distribution is incidental to the general merchandising of goods by wholesale or retail".

<sup>4</sup> Section 6(1), Canadian Radio-television and Telecommunications Commission Act.

<sup>5</sup> Section 7, Broadcasting Act 1991.

---

- (b) making regulations, with the approval of the federal government's Treasury Board, to establish schedules of fees to be paid by licensees, with such fees being calculated by reference to any criteria that CRTC deems appropriate, including the licensees' revenues and performance relating to objectives established by CRTC, and the market served by the licensees; and
- (c) making regulations concerning programme standards and the allocation of broadcasting time for giving effect to the government's statutory broadcasting policy, and the audit of the records of account of licensees by CTRC, and requiring licensees to submit to CRTC information on their programmes and financial affairs or the conduct and management of such affairs.

2.3.4 The issue of a radio broadcasting licence by CRTC is subject to directions from the Governor in Council. In particular, CRTC may not issue a licence, if the issue contravenes an order made by the Governor in Council to CRTC concerning matters such as the maximum number of channels or frequencies for the use of which licences may be issued within a designated geographical area, and the reservation of channels or frequencies for the use of the Canadian Broadcasting Corporation (the national public service broadcaster) or for any designated special purpose.<sup>6</sup>

#### Accountability

2.3.5 CRTC reports to the Parliament of Canada through the federal government's Minister of Canadian Heritage. CRTC may hold a public hearing, make a report, issue a decision and give an approval in connection with any complaint or representation made to CRTC or in connection with any other matter within its jurisdiction under the Broadcasting Act 1991, "if it is satisfied that it would be in the public interest to do so".<sup>7</sup>

---

<sup>6</sup> Sections 22(1) and 26(1), Broadcasting Act 1991.

<sup>7</sup> Section 18(3), Broadcasting Act 1991.

---

## 2.4 Allocation of broadcasting spectrum

2.4.1 In Canada, the federal government's department of industry, Industry Canada, is responsible for allocating spectrum for radio broadcasting services. Any person or organization wishing to operate such a service must apply for a frequency and broadcast certification. The frequency is assigned administratively by Industry Canada, which has not made publicly available detailed information on the allocation criteria. Industry Canada has been reviewing its spectrum policy in recent years. Under its 2007 Spectrum Policy Framework for Canada, Industry Canada states that spectrum management should "maximize the economic and social benefits that Canadians derive from the use of the radio frequency spectrum resource". The Framework contains certain guidelines, including:<sup>8</sup>

- (a) market forces should be relied upon "to the maximum extent feasible";
- (b) spectrum should be made available for a range of services that are "in the public interest", notwithstanding (a);
- (c) regulatory measures, where required, should be "minimally intrusive, efficient and effective";
- (d) regulation should be "open, transparent, reasoned and developed through public consultation", where appropriate;
- (e) spectrum management practices, including licensing methods, should "minimize administrative burden and be responsive to changing technology and market place demands"; and
- (f) spectrum policy and management should support the efficient functioning of markets by, among others, permitting the flexible use of spectrum to the extent possible, facilitating secondary markets for spectrum authorizations, re-allocating spectrum where appropriate, while taking into account the impact on existing services, and applying enforcement that is "timely, effective and commensurate with the risks posed by non-compliance".

---

<sup>8</sup> Industry Canada (2007) pp.8-9.

---

---

---

---

## 2.5 Licensing of radio broadcasting services

2.5.1 In Canada, besides applying for a frequency and broadcast certification from Industry Canada for the use of broadcasting spectrum, any person or organization wishing to operate a radio broadcasting service must apply for a broadcasting licence from CRTC.<sup>9</sup> The whole application process normally takes eight to 18 months, depending on whether there are competing applications for the licence.

### Criteria for assessing applications

2.5.2 An applicant must meet the following minimum criteria:

- (a) Canadian ownership;<sup>10</sup>
- (b) whether financing is available;
- (c) whether technical capacity meets Industry Canada's requirements; and
- (d) whether programming meets the requirements set out in the government's statutory broadcasting policy.

2.5.3 CRTC may require an applicant to conduct a market study to confirm the demand for the proposed service and show how it will increase diversity in the market. The market study must also address the effect the new broadcasting service would have on existing broadcasters.

---

<sup>9</sup> Section 32, Broadcasting Act 1991. Every person who carries on a broadcasting undertaking without a licence is guilty of an offence punishable on summary conviction and is liable, in the case of an individual, to a fine not exceeding CAN\$20,000 (HK\$156,000) for each day that the offence constitutes; or, in the case of a corporation, to a fine not exceeding CAN\$200,000 (HK\$1,560,000) for each day that the offence constitutes.

<sup>10</sup> The term "Canadian" is defined in the Direction to the CRTC (Ineligibility of Non-Canadian) issued by the Minister of Canadian Heritage in 1997. Its meaning includes a citizen or permanent resident ordinarily resident in Canada, a Canadian government or its agency, a qualified corporation, or a qualified co-operative. A "non-Canadian" means "a person or entity that is not a Canadian". If CRTC determines that an applicant is controlled by a "non-Canadian", "whether on the basis of personal, financial, contractual or business relations or any other considerations relevant to determining control, other than the beneficial ownership and control of the voting shares of a qualified successor by a Canadian carrier or its acquiring corporation", the applicant is deemed to be a non-Canadian.

---

---

### Public participation in the licensing process

2.5.4 Upon receipt of an application, CRTC may review whether it is complete and, if so, it may call for competing applications. CRTC must hold a public hearing on the application or competing applications for a licence,<sup>11</sup> which must be announced, via a public notice, in the Canada Gazette at least 60 days before the hearing. Members of the public can view the application(s), along with other related documents, at CRTC offices or local addresses indicated in the public notice. Applications filed electronically can be viewed on CRTC's website. Members of the public are invited to provide written comments supporting or opposing the application(s), which will automatically form part of a publicly-accessible file for public consultation. The applicant(s) and anyone providing written comments on the application(s) may be asked to appear at the hearing to provide additional information.

2.5.5 After the hearing, CRTC reviews all of the information received and may approve the application, approve part of the application or deny the application. All of its decisions are announced in the Canada Gazette. If CRTC grants a new broadcasting licence, the new licensee is typically given one year to launch its service.

### Appeal mechanism and public petition

2.5.6 All CTRC's decisions on the issue of a licence are "final and conclusive", unless the applicant failing to obtain a licence makes an appeal to the Federal Court of Appeal.<sup>12</sup>

2.5.7 In addition, any person may petition the Governor in Council to urge CRTC to reconsider its decision to issue (amend or renew) a licence. The Governor in Council may, within 90 days after the date of CRTC's decision, on petition in writing of any person received within 45 days after that date or on the Governor in Council's own motion, by order, "set aside the decision and refer the decision back to" CRTC for reconsideration and hearing of the matter, if the Governor in Council is satisfied that the decision derogates from the attainment of the objectives of the statutory broadcasting policy.<sup>13</sup> CRTC is obliged to reconsider the decision and hold a hearing on it. CTRC may:<sup>14</sup>

- (a) rescind the decision or the issue of the licence;

---

<sup>11</sup> Sections 18(1) and (2) and 19, Broadcasting Act 1991. CRTC may also hold a public hearing on the amendment or renewal of a licence, "unless it is satisfied that such a hearing is not required in the public interest". The term "public interest" is not defined in the Act.

<sup>12</sup> Section 31, Broadcasting Act 1991.

<sup>13</sup> Section 28(1), Broadcasting Act 1991.

<sup>14</sup> Section 28(3), Broadcasting Act 1991.



- (b) rescind the issue of the licence and issue a licence on the same or different conditions to another person; or
- (c) confirm, either with or without change, variation or alteration, the decision or the issue of the licence.

## **2.6 Broadcasting licence fees**

2.6.1 As mentioned in **paragraph 2.3.3**, CRTC may make regulations on licence fees to be paid by radio broadcasting licensees.

### Statutory fee-setting criteria

2.6.2 CRTC may set licence fees by reference to any criteria it deems appropriate, including:<sup>15</sup>

- (a) licensees' revenues;
- (b) licensees' performance relating to objectives set by CRTC; and
- (c) markets served by the licensees.

### Public consultation

2.6.3 Each regulation on licence fees proposed by CRTC must be published in the Canada Gazette. CRTC must provide a "reasonable opportunity" to licensees and other interested persons to make representations to CRTC on such proposed regulations.<sup>16</sup> CRTC must also hold a public hearing on the establishment of any performance objectives for the licensees to which CRTC may make reference when setting licence fees.<sup>17</sup>

### Licence fee calculation

2.6.4 Licence fees are payable to CRTC annually in two parts:<sup>18</sup>

- (a) Part I licence fee, payable 30 days after the date of the invoice from CRTC; and

---

<sup>15</sup> Section 11(1)(a), Broadcasting Act 1991.

<sup>16</sup> Section 11(5), Broadcasting Act 1991.

<sup>17</sup> Section 18(1)(c), Broadcasting Act 1991.

<sup>18</sup> Section 7, Broadcasting Licence Fee Regulations, 1997.

- (b) Part II licence fee, payable on or before November each year.

*Part I licence fee*

2.6.5 The Part I licence fee is based on the broadcasting regulatory costs incurred each year by CRTC and other federal departments or agencies, excluding spectrum management costs. It comprises an initial amount and an annual adjustment amount, as shown below:

2.6.6 The initial amount is calculated by CRTC using the formula  $(A/B) \times C$  where

- "A" is a licensee's fee revenues for the most recently completed return year, less that licensee's exemption level<sup>19</sup> for that return year;
- "B" is the aggregate fee revenues for the most recently completed return year of all licensees whose fee revenues exceed the applicable exemption levels, less the aggregate exemption level for such licensees for that return year; and
- "C" is the estimated total regulatory costs of CRTC for the current fiscal year, which refers to the sum of the costs of CRTC's broadcasting regulatory activities, and the share that is attributable to CRTC's broadcasting regulatory activities of the costs of CRTC's administrative activities and the other costs that are taken into account to arrive at the net cost of CRTC's programme, excluding the costs of regulating broadcasting spectrum.

2.6.7 The annual adjustment amount is calculated by CRTC using the formula  $(A/B) \times D$  where

- "A" and "B" are defined in **paragraph 2.6.6**; and
- "D" is the difference between the estimated total regulatory costs and the actual total regulatory costs of CRTC for the fiscal year. The actual total regulatory costs are calculated in accordance with the formula specified in **paragraph 2.6.6** using actual amounts.

---

<sup>19</sup> Under the Broadcasting Licence Fee Regulations 1997, the exemption level for a radio undertaking is CAN\$2 million (HK\$16 million) where the undertaking's fee revenue is CAN\$2 million (HK\$16 million) or less, and CAN\$500 000 (HK\$4 million) where the undertaking's fee revenue is greater than CAN\$2 million (HK\$16 million).

## *Part II Licence Fee*

2.6.8 The Part II Licence Fee is an annual licence fee, based on a licensee's fee revenue for the return year that terminated in the current calendar year or during that portion of that return year in which the licensee held the licence to operate the undertaking, the amount of which is calculated as follows:

- (a) for a radio undertaking, 1.365% of the amount by which the fee revenue exceeds the applicable exemption level; and
- (b) in the case of a joint radio undertaking, 1.365% of the amount by which the combined fee revenue exceeds the applicable exemption level.

2.6.9 CRTC collects the Part II licence fees on behalf of the federal government, with all revenues collected being deposited to the government's Consolidated Revenue Fund. The rationale for assessing this fee is three-fold:

- (a) earning a fair return for the Canadian public for access to, or exploitation of, a publicly owned or controlled resource (i.e. broadcasters' use of broadcasting spectrum);
- (b) recovering the costs of Industry Canada associated with the management of broadcasting spectrum; and
- (c) representing the privilege of holding a broadcasting licence for commercial benefits.

## **2.7 Efforts to promote public access channels**

2.7.1 Since 1992, CRTC has formulated a community radio policy to promote public access to the airwaves in Canada. In 2000, it revised the policy to facilitate the development of community radio. CRTC defines a community radio station as a station "owned and controlled by a non-for-profit organization, the structure of which provides for membership, management, operation and programming primarily by members of the community at large", with its programming reflecting "the diversity of the market that the station is licensed to served".<sup>20</sup>

---

<sup>20</sup> Canadian Radio-television and Telecommunications Commission (1992) and (1999).

---

2.7.2 According to CRTC, the primary focus of a community radio station is to "provide community access to the airwaves" and "offer diverse programming that reflects the needs and interests of the community that the station is licensed to served", including "music by new and local talent; music not generally broadcast by commercial stations; spoken word programming; and local information".<sup>21</sup> CRTC expects all community radio licensees to "facilitate community access to their programming by clearly informing the public of opportunities for community participation".<sup>22</sup> CRTC believes that community radio is essential to implement the statutory broadcasting policy, which recognizes the importance of "community elements" in the broadcasting system and of providing "varied and comprehensive" radio services to Canadians, as mentioned in **paragraph 2.2.1**.

### Licensing

2.7.3 Any person or organization wishing to obtain a community radio licence is generally required to go through the application process mentioned in **paragraphs 2.5.2 to 2.5.5**.

2.7.4 CRTC allows the operation of three types of licensed community radio stations to serve different markets or purposes, namely Type A stations, Type B stations and low-power developmental community stations. A Type A station provides the only private radio service in English or French in a locality, while a Type B station operates in competition with other private radio services. These two types of stations are subject to somewhat different programming requirements. For instance, Type A and Type B stations are required to devote at least 15% and 25% of airtime in each broadcast week to "spoken word" programmes respectively, with an emphasis on community-oriented "spoken word". On the other hand, developmental community stations are encouraged to serve as a training ground for the future establishment of higher power community stations. They are generally licensed for a term of three years. At the end of the term, licensees will be expected to apply for a regular community radio licence or cease operation. Since 2000, CRTC has introduced a streamlined regulatory framework for such stations. For instance, applications are not required to show evidence of the availability of financing.

---

<sup>21</sup> Canadian Radio-television and Telecommunications Commission (1999).

<sup>22</sup> Ibid.

---

---

---

---

## 2.8 Development of digital radio broadcasting

2.8.1 CRTC started promoting DRB in October 1995 by announcing a public notice entitled "A Policy to Govern the Introduction of Digital Radio" as the policy framework for DRB, following the establishment of the L-band allotment plan<sup>23</sup> by Industry Canada one month before. CRTC selected the European Eureka-147 system<sup>24</sup> as a technical standard for DRB. The technology can operate in both L-band and Band III (174 MHz - 240 MHz)<sup>25</sup>, and enable transmission of pictures, text and videos for small displays and multi-channel broadcasting by combining several different radio services into a single stream of digital data.

### Implementation strategy

2.8.2 Under its 1995 policy framework, CRTC set out a two-stage approach to the introduction of DRB as an early experiment in Canada. The first stage involved establishing a licensing process for DRB on a transitional basis, under which transitional digital radio licences would be issued for a term of three years. The second stage involved considerations of all aspects of DRB in the longer term, which would ultimately lead to the establishment of a permanent licensing regime for DRB undertakings. In view of digital radio being a replacement technology for existing analogue radio services, CRTC decided that existing radio services would have priority access, but not exclusive access, to the digital band. As of 1 October 2006, CRTC authorized 76 transitional digital radio programming undertakings. Of these undertakings, 57 were authorized to operate in association with existing commercial radio stations, 18 were authorized to operate in association with existing Canadian Broadcasting Corporation radio stations, and one was authorized to operate as a stand-alone ethnic radio station.<sup>26</sup>

---

<sup>23</sup> L-Band is a range of frequencies within which an allocation has been made, generally by satellite, for broadcasting in most of the world in the range of 1452 MHz to 1492 MHz, but in Europe for terrestrial digital sound broadcasting in the range of 1452 MHz to 1480 MHz. Some DRB digital receivers can tune to this range. "Allotment" is the provision of a specific channel for a Digital Service Area, as defined in an allotment plan. A Digital Service Area represents the geographical area in which DRB service is intended to be provided. A list of current DRB allotment is published by Industry Canada in the Allotment Plan for Digital Radio Broadcasting.

<sup>24</sup> The European Eureka-147 system, developed in the 1980s, is the first DRB standard endorsed by the International Telecommunication Union. It has so far been the most popular technical standard adopted by continental European countries, the UK, Singapore and Australia.

<sup>25</sup> Band III refers to a radio frequency range within the very high frequency part of the electromagnetic spectrum. It is primarily used for radio and television broadcasting.

<sup>26</sup> Canadian Radio-television and Telecommunications Commission (2006).

### Problems

2.8.3 In 2006, a digital radio policy review conducted by CRTC revealed that "after a promising start, the rollout of DRB had slowed in recent years in Canada". The adoption of the new digital radio technology by consumers and the switch-over by the radio industry to digital were "effectively stalled", and some stations that began broadcasting in digital had ceased operations.<sup>27</sup> According to CRTC, there were four main reasons for the slowdown of the DRB rollout:<sup>28</sup>

- (a) availability of L-band DRB receivers was limited and their cost was relatively high in the Canadian market because most countries launching DRB had digital radio broadcast in Band III rather than L-Band, and the requirement for DRB receivers to accommodate both official languages (French and English) in Canada meant that such receivers had to be solely manufactured for, or at least adapted to, the Canadian market;
- (b) DRB was implemented in the major markets only, which were some distance apart;
- (c) radio stations offering DRB service, which required listeners to purchase relatively expensive DRB receivers, continued to broadcast existing analogue programming, albeit with better sound; and
- (d) new technologies and distribution platforms (such as Internet-based methods and satellite radio services) of delivering audio contents emerged rapidly, offering listeners a multitude of programming choices and the ability to tailor such choices to their personal tastes and preferences.

### Revised digital radio broadcasting policy

2.8.4 Given the problems faced by L-band DRB in Canada, CRTC has revised its DRB policy. For instance, DRB is no longer deemed as a replacement technology but a technology that will co-exist with the existing analogue services. CRTC will consider adopting the In-Band-On-Channel technology in Canada. The technology, which is being used as the transmission standard for DRB in the US, makes use of the existing AM and FM bands by adding digital carriers to a radio station's analogue signal, allowing broadcasters to transmit digitally on their existing channel assignments while simultaneously maintaining their analogue services. In addition, CRTC will consider measures to encourage broadcasters to develop innovative programming services that will be delivered to the listening public solely by digital means.

---

<sup>27</sup> Canadian Radio-television and Telecommunications Commission (2006).

<sup>28</sup> Ibid.

## Chapter 3 – United Kingdom

### 3.1 Major types of radio broadcasting services

3.1.1 In the UK, other than public service broadcasters such as the British Broadcasting Corporation (BBC) and Channel 4 Radio Limited (Channel 4), there are various types of radio broadcasting services, including:

- (a) three national analogue commercial radio broadcasting services;
- (b) some 280 local analogue commercial radio broadcasting services;
- (c) some 80 community radio services; and
- (d) two national commercial radio multiplexes<sup>29</sup> providing digital audio broadcasting (DAB) services and about 46 DAB local or regional radio multiplex.

### 3.2 Government's radio broadcasting policy

3.2.1 The UK government's current radio broadcasting policy is mainly set out in the document "Radio – Preparing for the future" published in 2005. The document presents the public purposes for the radio broadcasting sector, namely:<sup>30</sup>

- (a) sustaining citizenship and civil society;
- (b) promoting education and learning;
- (c) stimulating creativity and culture excellence;
- (d) representing the UK and its nations, regions and communities;
- (e) bringing the UK to the world and the world to the UK; and
- (f) promoting social gain.

---

<sup>29</sup> "Multiplex" is a number of signals or streams of information transmitted at the same time in the form of a single, complex signal. The separate signals are then recovered by the receiver.

<sup>30</sup> Ofcom (2005).

3.2.2 To implement its radio broadcasting policy, the UK government has established a strategic framework with the following three elements:

- (a) enhancing choice, diversity and innovation for consumers at the national, regional, local and community levels. This includes ensuring a wide range of services in the commercial sector and the provision of local material by regulating in the most effective way possible; and encouraging the development of more choices and competition by licensing new analogue and digital services and encouraging the growth of digital radio;
- (b) securing citizens' interests through the provision of radio services designed to meet public purposes, which will be met in different ways by different sectors, taking into account, among others, the importance of plurality of provision of radio broadcasting services designed to deliver those purposes; and the need to encourage the development of a thriving community radio sector; and
- (c) securing the above two elements with as little intervention in the market as possible, such as adapting regulation to changes in the market and increasing levels of competition.

### **3.3 Regulatory authority of radio broadcasting services**

3.3.1 In the UK, Ofcom, established as a body corporate by the Office of Communications Act 2002, is responsible for regulating radio broadcasting services.

#### Appointment

3.3.2 Ofcom comprises a chair appointed by the responsible Minister, a certain number of other members appointed by the Minister as he or she may determine, and executive members who must comprise the chief executive of Ofcom and such other people (if any) as may be appointed from among Ofcom's employees.



---

---

### Statutory duties and powers

3.3.3 Ofcom's statutory duties and powers for radio broadcasting are mainly set out in the Communications Act 2003 (CA2003), the Broadcasting Act 1990 as amended and the Broadcasting Act 1996. Its general statutory duties are to:<sup>31</sup>

- (a) "further the interests of citizens<sup>32</sup> in relation to communications matters"; and
- (b) "further the interests of consumers in relevant markets, where appropriate, by promoting competition".

3.3.4 In particular, Ofcom is required to perform certain duties relating to radio broadcasting, which include:<sup>33</sup>

- (a) ensuring the "optimal use" for wireless telegraphy of broadcasting spectrum;
- (b) ensuring the availability throughout the UK of a wide range of radio services which are both of "high quality" and "calculated to appeal to a variety of tastes and interests"; and
- (c) maintaining a "sufficient plurality of providers" of different radio services.

3.3.5 Under CA2003, when Ofcom resolves a conflict in "an important case"<sup>34</sup> between its duty of furthering the interests of citizens in relation to communications matters and that of furthering the interests of consumers in relevant markets, where appropriate, Ofcom must publish a statement setting out the nature of the conflict, the manner in which it has resolved the conflict, and the reasons for its decision to resolve the conflict in that manner.<sup>35</sup>

---

<sup>31</sup> Section 3(1), CA2003.

<sup>32</sup> Under section 3(14) of CA2003, "citizens" means all members of the public in the UK.

<sup>33</sup> Section 3(2), CA2003.

<sup>34</sup> Under sections 3 (11) and (12) of CA2003, "an important case" refers to a case that involves "a major change in the activities carried on by Ofcom", and/or a matter "likely to have a significant impact on persons carrying on businesses in any relevant markets" or "on the general public in the UK or in a part of the UK". It also refers to a case that "appears to Ofcom to have been of unusual importance".

<sup>35</sup> Section 3(8), CA2003.

---

3.3.6 CA2003 requires Ofcom's regulatory duties to be "transparent, accountable, proportionate, consistent and targeted only at the cases in which action is needed". Ofcom must have regard to certain statutory regulatory principles, including:<sup>36</sup>

- (a) "desirability of promoting competition in relevant markets";
- (b) desirability of "encouraging investment and innovation in relevant markets";
- (c) "different needs and interests" of persons who may wish to make use of broadcasting spectrum;
- (d) need to ensure the application of standards in radio services to "best guarantee an appropriate level of freedom of expression"; and
- (e) opinions of consumers in relevant markets and of members of the public generally.

#### Accountability

3.3.7 Under CA2003, Ofcom is required to provide its annual report to the responsible Minister who must lay it before the UK Parliament.

### **3.4 Allocation of broadcasting spectrum**

3.4.1 Ofcom has a statutory duty to ensure the optimal use of the radio frequency spectrum to further the interests of citizens and consumers.<sup>37</sup> Under CA2003, Ofcom is responsible for spectrum allocation in the UK for non-military purposes, including radio broadcasting, although the responsible Minister may from time to time make directions to Ofcom. Ofcom must therefore work closely with the government in planning spectrum use.<sup>38</sup>

3.4.2 Ofcom has adopted a "command and control" approach to spectrum management, under which it decides how much spectrum each application should have, what use the spectrum should be put to (i.e. spectrum allocation) and which user(s) should gain a licence to use the spectrum within the agreed allocation (i.e. spectrum assignment). Ofcom has made only a small amount of spectrum available for "licence-exempt use", i.e. allowing free access to the spectrum, normally with restrictions on power levels to reduce the probability of interference.

---

<sup>36</sup> Section 3(4), CA2003.

<sup>37</sup> Sections 3(1) and (2)(a), CA2003.

<sup>38</sup> Ofcom (2007) p.25.

3.4.3 In addition to a broadcasting licence, a radio broadcast licensee may need a Wireless Telegraph Act licence, which is also granted by Ofcom, to install or use radio equipment or apparatus in a clearly defined way. Nevertheless, for some types of radio stations, their equipment does not need a Wireless Telegraphy Act licence, if Ofcom is satisfied that their use is "not likely to involve any undue interference with wireless telegraphy".<sup>39</sup> Qualification for exemption is related to the nature of the equipment or frequencies being used. Factors influencing whether undue interference occurs include particular frequency assigned for transmission, power of transmission, use to which the equipment is put, and compliance of the equipment with agreed national or international standards. When considering frequencies suitable for exemption, Ofcom must take into account the difficulties involved in subsequent re-allocation of the spectrum.<sup>40</sup>

3.4.4 In recent years, Ofcom has been introducing changes to its spectrum management policies. In 2005, Ofcom published the Spectrum Framework Review setting out an outline plan for spectrum management until 2010. Ofcom's vision for spectrum management is for market forces to play an increasingly important role in determining how spectrum is managed and used. While retaining the "command and control" approach, Ofcom has allowed market forces to decide on the use and user of certain amount of spectrum through auction, trading and liberalization. However, these market-oriented measures have not been applied to spectrum allocation for radio broadcasting.<sup>41</sup>

### **3.5 Licensing of radio broadcasting services**

3.5.1 In the UK, Ofcom is responsible for licensing all non-BBC radio broadcasting services, including national and local commercial radio services.<sup>42</sup>

---

<sup>39</sup> Section 8, Wireless Telegraphy Act 2006.

<sup>40</sup> Ofcom (2007) p.17.

<sup>41</sup> Ofcom (2008) p.12.

<sup>42</sup> BBC radio services are not licensed by Ofcom. They operate under the terms of BBC's Charter and Agreement.

---

---

---

### Cash bids for national analogue commercial radio licences

3.5.2 Under the Broadcasting Act 1990 as amended, Ofcom must award national analogue commercial radio licences through a cash bid process. Where Ofcom proposes to grant such a licence, it must publish a notice inviting applications for the licence. Normally, Ofcom awards the licence to the highest bidder.<sup>43</sup> However, Ofcom may award the licence to an applicant who has not submitted the highest bid, if it appears to Ofcom that there are "exceptional circumstances" which make it appropriate for Ofcom to award the licence to that applicant.<sup>44</sup> Ofcom must provide reasons for the licence being so awarded.<sup>45</sup>

### Open competition for local analogue commercial radio licences

3.5.3 Ofcom must award licences for local commercial radio analogue services in an open competition to the applicant who best meets the statutory criteria set out in the Broadcasting Act 1990 as amended. Such criteria are:

- (a) applicant's ability to maintain the proposed service throughout the licence period;
- (b) extent to which the proposed service would cater for the tastes and interests of people living in the area or locality for which the service would be provided;
- (c) extent to which the proposed service would broaden the range of programmes available to people living in that area or locality, and in particular, the extent to which the service would cater for tastes and interests different from those already catered for by other local services provided to that area or locality; and
- (d) extent to which the application is supported by people in that area or locality.

---

<sup>43</sup> Section 100 (1), Broadcasting Act 1990 as amended.

<sup>44</sup> Section 100 (3), Broadcasting Act 1990 as amended.

<sup>45</sup> Section 100 (9), Broadcasting Act 1990 as amended.

---

3.5.4 Ofcom assesses applications for such licences with a scoring system derived from the statutory criteria mentioned in **paragraph 3.5.3**, focusing on the following aspects:<sup>46</sup>

- (a) ability to maintain service, i.e. the extent to which: (i) the overall business plan indicates the applicant's ability to maintain the proposed service; (ii) financial and audience forecasts, sources and levels of funding, and the projected revenues and costs are appropriate or realistic; (iii) the people who would be running the station have relevant experience, knowledge and contacts; and (iv) the transmission proposals are appropriate and can be implemented;
- (b) catering for tastes and interests, i.e. the extent to which: (i) the proposed broadcasting format fits with the applicant's expressed programming philosophy and is consistent with the applicant's research findings; and (ii) the programming proposals are coherent and capable of delivering the proposed service;
- (c) broadening of choice, i.e. the extent to which the proposed service would broaden the choices for the listener; and
- (d) evidence of demand and support, i.e. the extent to which an applicant's research demonstrates evidence of demand for the proposed service.

3.5.5 The scoring system is used by Ofcom's staff to highlight the different strengths and weaknesses of each application when preparing briefing materials for Ofcom's Radio Licensing Committee to decide on awarding the licence. A score between 0 and 10 is assigned to every application for each of the four statutory criteria mentioned in **paragraph 3.5.4**. According to Ofcom, since the scoring system is intended to be merely a tool to aid the licence awarding process, no overall total score is assigned to each application, and the scores for each criterion do not bind the Radio Licensing Committee when making a decision. As such, it is not necessarily the case that the application achieving the highest score across all four statutory criteria will be awarded the licence. While Ofcom is required to have regard to all four statutory criteria, it may regard one or more of the criteria as being particularly important in view of the characteristics of the licence to be awarded and the applications for it. In addition, the four statutory criteria do not necessarily carry equal weighting; nor do they represent an exhaustive list. According to Ofcom, it does not intend to make available to applicants details of the scores allocated to their applications.

---

<sup>46</sup> Section 105, Broadcasting Act 1990 as amended.

### 3.6 Broadcasting licence fees

3.6.1 In the UK, radio broadcast licensees are required to pay broadcast licence fees to Ofcom every year. The basic principle of the licence fee calculation is to secure that the aggregate amount of such licence fees required to be paid to Ofcom during a financial year is "sufficient to meet the cost of Ofcom's functions relating to the regulation of broadcasting".<sup>47</sup>

#### Fees for national and local commercial analogue radio licences

3.6.2 The annual fees for national and local commercial analogue radio licences are calculated as a percentage of "relevant turnover (radio)", which comprises the revenues (exclusive of value added tax) in respect of each "relevant calendar year"<sup>48</sup> derived from the provision of the licensed service of a licensee. Such revenues include broadcasting and advertising revenues, sponsorship and broadcast airtime sales.<sup>49</sup> A tariff table setting out the percentage of licensees' "relevant turnover (radio)" is published by Ofcom every year, as shown in **Table 1**.

**Table 1 – National and local commercial analogue radio licence fees**

Revenues	Tariff for 2007-2008 as a % of relevant turnover (radio)
£0m – £1m (HK\$15.3m)	0.248%
£1m (HK\$15.3m) – £5m (HK\$76.7m)	0.371%
Over £5m (HK\$76.7m)	0.557%

#### Fees for all other types of radio licences

3.6.3 The annual fees for all other types of radio licences have been set at a fixed rate, as shown in **Table 2**.

<sup>47</sup> Ofcom (2005) p.4.

<sup>48</sup> Ofcom (2005) pp.12-13. "Relevant calendar year" means, in respect of a "charging year" (the 12-month period commencing on 1 April in a calendar year and ending on 31 March in the immediately following calendar year), the 12-month period commencing on 1 January in the last but one calendar year prior to the charging year. For example, if the "charging year" commences on 1 April 2007, the "relevant calendar year" will be the calendar year of 2005.

<sup>49</sup> Ofcom (2005) pp.44-46.

**Table 2 – Fees for all other types of radio licences**

Radio licences	Tariff for 2007-2008
Community radio licences	£600 (HK\$9,200)
DAB National radio multiplex licences	£10,000 (HK\$153,000)
DAB Local radio multiplex	£500 (HK\$7,700)

### 3.7 Efforts to promote public access channels

3.7.1 In recent years, Ofcom has introduced a new type of radio stations called community radio to facilitate public access to the airwaves. Ofcom first invited applications for community radio licences across the UK in September 2004 and finished the round of licensing in May 2006, with 107 groups being awarded a licence. The first community radio station was launched in November 2005. As of November 2007, Ofcom offered community radio licences to some 149 stations, of which about 80 have commenced broadcasting.

3.7.2 Community radio is intended to be "clearly distinct from commercial broadcasting and BBC".<sup>50</sup> To ensure this distinction, the legislation imposes specific "characteristics of service" requirements to which such stations must adhere. Community radio must:<sup>51</sup>

- (a) be provided primarily for the good of members of the public or of particular communities rather than primarily for commercial reasons or financial or other material gain;
- (b) deliver social gain;<sup>52</sup>

<sup>50</sup> Ofcom (2007) p.16.

<sup>51</sup> Section 3, Community Radio Order 2004.

<sup>52</sup> Sections 2(2) and (3), Community Radio Order 2004. "Social gain" is defined as the achievement of the following objectives concerning individuals or groups of individuals in the community that the service is intended to serve or other members of the public: (a) the provision of sound broadcasting services to individuals who are otherwise underserved by such services; (b) the facilitation of discussion and the expression of opinion; (c) the provision of education or training to individuals not employed by the person providing the service; and (d) the better understanding of the particular community and the strengthening of links within it. "Social gain" may also include the achievement of other objectives of a social nature, including the delivery of services provided by local authorities and other services of a social nature and the increasing, and wider dissemination, of knowledge about those services and local amenities, the provision of opportunities for the gaining of work experience, and the promotion of economic development, social enterprises, employment, social inclusion, cultural and linguistic diversity, civic participation and volunteering.

- (c) be intended primarily to serve one or more communities<sup>53</sup> (whether or not it also serves other members of the public);
- (d) operate on a not-for-profit or non-profit-distributing basis in that the service provider must use any profit that is produced in the provision of the service wholly and exclusively for securing or improving the future provision of the service, or for the delivery of social gain to members of the public or the community that the service is intended to serve;
- (e) provide members of the target community opportunities to participate in the operation and management of the service; and
- (f) be accountable to the target community.

### Licensing

3.7.3 A community radio station needs a licence awarded by Ofcom to broadcast. The statutory framework for awarding such a licence and the obligations to be met by the licensee are mainly set out in the Community Radio Order 2004. Ofcom invites applications for community radio once a year. Ofcom does not specify where a service should be; instead applicants are required to identify the location and community they wish to serve.

### *Selection criteria*

3.7.4 When determining whether to grant a community radio licence, Ofcom must take into account an applicant's ability to:<sup>54</sup>

- (a) maintain the proposed service for the duration of the licence, such as whether an applicant has, or is likely to have, access to sufficient financial and other resources to establish and maintain the proposed service;
- (b) cater for the tastes and interests of members of the target community;
- (c) broaden the range of programmes available by way of local services to persons living in the area or locality in which it would be provided;

---

<sup>53</sup> Under section 2 of the Community Radio Order 2004, "community" means (a) the persons who live or work or undergo education or training in a particular area or locality, or (b) the persons who have one or more interests or characteristics in common.

<sup>54</sup> Section 105 of the Broadcasting Act 1990 as amended.



- 
- 
- (d) provide evidence of demand or support for the proposed service;<sup>55</sup>
  - (e) deliver social gain to the public or relevant community;
  - (f) be accountable to the target community; and
  - (g) provide members of that target community with opportunities to access station facilities and be trained in their use.

#### *Impact on local commercial radio service*

3.7.5 Besides the above selection criteria, Ofcom must seek to ensure that any community radio service "does not prejudice unduly the economic viability" of any other (non-BBC) local commercial radio service.<sup>56</sup> Accordingly, Ofcom must not grant a licence for a community radio service, if the service would overlap with an existing commercial radio service, the potential audience of which includes no more than 50,000 people who are at the age of at least 15. In addition, a community radio service is prohibited from taking any advertising or programme sponsorship, if the service overlaps with any other commercial radio service the potential audience of which includes more than 50 000 people who are at the age of at least 15 but less than 150 000 such people.

#### *Ownership restrictions*

3.7.6 Ofcom offers community radio licences to groups or organizations, such as not-for-profit companies or registered charities. Individuals are not entitled to such a licence. Community radio services must adhere to certain ownership requirements. In particular, any single organization may only own a maximum of one community radio licence. Besides commercial radio operators, BBC and Channel 4 are all prevented from holding such a licence. However, such a restriction does not apply to other broadcasters including satellite radio stations.

#### *Financial constraints*

3.7.7 Community radio licensees must operate under strict financial constraints. Ofcom usually allows such stations to include a certain amount of advertising and sponsorship in their broadcasts. However, Ofcom cannot grant a community radio licence to an applicant with a proposal of receiving from any one source more than 50% of the income in a financial year to provide the proposed service.

---

<sup>55</sup> According to Ofcom, it does not believe that generic support for the establishment of a new community radio station is generally as meaningful as evidence of considered support for an applicant's specific proposals. In addition, template-based letters or petitions will not generally be considered as significant evidence of support. Ofcom (2006) p.6.

<sup>56</sup> Section 5(3), Schedule, the Community Radio Order 2004.

---

---

*Duration of a community radio licence*

3.7.8 Unlike a local commercial licence which lasts for up to 12 years, a community radio licence lasts for up to five years<sup>57</sup>. There is no renewal procedure set out in the legislation. Towards the end of each period, the service provider may apply for another licence, but Ofcom does not guarantee that the licence will be available.

3.7.9 There is no fixed number of community radio licences available. Ofcom judges each application on the benefits it can bring to the local community.

Financial support to community radio

3.7.10 Community radio licensees can seek financial support from the Community Radio Fund administered by Ofcom, which is empowered by CA 2003 to "make such grants as they consider appropriate to the provider of any [community radio service]". The Fund aims at helping fund "the core works involved in running a community radio station".<sup>58</sup> According to Ofcom, such core works might include fundraising to support a station; administration and financial management; community outreach; and volunteer support. The UK government has provided up to £500,000 (HK\$7.7m) for the Fund every year until 2010-2011. Applications for the Fund are considered by a three-member Fund Panel, with two members being appointed by Ofcom and one from the Community Media Association (a non-profit-making body representing community radio and television in the UK). The payment of grants can only be made after a station has been launched. Every licensee receiving a grant is required to report back to the Fund Panel about how the grant has been spent. Without a satisfactory report back, the Fund Panel will not normally consider making a further grant to the licensee. In 2006-2007, the Fund Panel awarded grants to 40 community radio stations, totalling £830,000 (HK\$12.7 million).<sup>59</sup>

---

<sup>57</sup> A licensee is required to commence broadcasting within two years of a licence awarded. If the licensee is unable to do so, the licence may be withdrawn and the frequency concerned may be considered for use in the same area or elsewhere in the next round of awarding licence.

<sup>58</sup> Ofcom (2008) p.2.

<sup>59</sup> Ofcom (2007).

---

### 3.8 Development of digital radio broadcasting

3.8.1 In the UK, the growth in digital radio listeners has been one of the major trends in the radio industry in the past decade. In 1995, BBC first launched digital audio broadcasting services (known as DAB digital radio) and, as of early 2006, offered 11 UK-wide digital radio stations. Since BBC's first launch in 1995, commercial broadcasters have also made significant investments in digital radio. A national commercial multiplex licence was awarded in 1998 to a commercial radio broadcaster, Digital One. Digital One launched its first commercial services in 1999, and now offers eight services, which have a total coverage of 88% of the population. Local DAB commercial services are currently available from 48 local DAB digital radio multiplexes across the UK, providing more than 250 commercial and 34 BBC stations. In addition, a large number of radio services are available on digital television platforms and the Internet.<sup>60</sup> In July 2007, Ofcom awarded the second national radio multiplex licence to 4 Digital Group Ltd (whose shareholders include Channel 4 Radio Limited).

#### Licensing of DAB commercial radio multiplex

3.8.2 Ofcom is required to award national commercial radio multiplex licences in an open competition to the applicant who best meets the statutory criteria set out in the Broadcasting Act 1996. Such criteria include:<sup>61</sup>

- (a) extent to which the award of the licence to the applicant would be calculated to promote the development of digital sound broadcasting in the UK;
- (b) extent of the coverage the applicant proposes to achieve and by what timetable this will be achieved;
- (c) applicant's ability to establish the proposed service and maintain it throughout the licence period;
- (d) capacity of the digital sound programme services proposed by the applicant to appeal to a variety of tastes and interests;
- (e) whether the applicant has behaved in a way likely to ensure fair and effective competition in contracting with those people providing digital sound programme services or digital additional services;<sup>62</sup> and

---

<sup>60</sup> Ofcom (2005) p.10.

<sup>61</sup> Sections 47(1) and (2), Broadcasting Act 1996.

<sup>62</sup> Digital additional services are data services provided on a radio multiplex.

- (f) applicant's proposal to encourage listeners to acquire new radio sets capable of receiving digital sound broadcasting service.

3.8.3 The criteria adopted by Ofcom to consider applications for DAB local multiplex licences are similar to those for DAB national commercial radio multiplex licences.<sup>63</sup>

#### Factors contributing to the growth of digital radio

3.8.4 According to Ofcom, the relative success of the development of digital radio in the UK has been the result of a combination of factors, including:

- (a) high take-up of digital television, which offers digital radio;
- (b) spectrum allocation for DAB digital radio balanced between commercial players and BBC and also between local and national multiplexes;
- (c) broad build-out of transmitter networks by Digital One, BBC and local commercial multiplex operators;
- (d) successful DAB licensing regime which provides incentives for analogue stations to go digital by extending their analogue licensing;
- (e) commitment of the radio industry to marketing via the Digital Radio Development Bureau (which is the radio industry trade body for DAB digital radio in the UK) and individually; and
- (f) innovation and risk-taking by a number of smaller UK radio manufacturers, which have helped kick start the DAB receiver market.

---

<sup>63</sup> Sections 51(1) and (2), Broadcasting Act 1996.

---

---

## **Chapter 4 – Australia**

### **4.1 Major types of radio broadcasting services**

4.1.1 In Australia, there are two main types of radio broadcasting services other than public service broadcasting, namely:

- (a) commercial radio services, which has more than 260 licensed stations broadcasting; and
- (b) community radio services, which has 343 licensed stations broadcasting.

### **4.2 Government's radio broadcasting policy**

4.2.1 In Australia, the federal government's broadcasting policy is mainly set out in the Broadcasting Services Act 1992. The major aspects of the policy relating to radio broadcasting services are as follows:<sup>64</sup>

- (a) promoting the availability to audiences of a diverse range of radio services offering entertainment, education and information;
- (b) providing a regulatory environment that will facilitate the development of a broadcasting industry that is "efficient, competitive and responsive to audience needs";
- (c) encouraging "diversity in control of the more influential broadcasting services";
- (d) promoting the role of broadcasting services in developing and reflecting a sense of Australian identity, character and cultural diversity;
- (e) encouraging providers of commercial and community broadcasting services to be responsive to the need for a fair and accurate coverage of matters of public interest and for an appropriate coverage of matters of local significance;

---

<sup>64</sup> Section 3(1), Broadcasting Services Act 1992.

- (f) promoting the availability to audiences of radio programmes about matters of local significance; and
- (g) ensuring the development of diversity, including public, community and indigenous broadcasting, in the Australian broadcasting system in the transition to digital broadcasting.

### **4.3 Regulatory authority of radio broadcasting services**

4.3.1 In Australia, the Australian Communications and Media Authority (ACMA) is responsible for regulating radio broadcasting services. Established under the Australian Communications and Media Authority Act 2005 (the ACMA Act), ACMA is a statutory body under the federal government's Ministry of Communications, Information Technology and the Arts.

#### Appointment

4.3.2 ACMA comprises a Chair, a Deputy Chair and at least one and not more than seven other members. All members are appointed by the Governor-General of Australia. The Chair and the Deputy Chair must be appointed as full members. A member, other than the Chair or the Deputy Chair, may be appointed as a full-time or part-time member.<sup>65</sup>

#### Statutory functions

4.3.3 Under the ACMA Act, the functions of ACMA are divided into three aspects, two of which are relevant to the regulation of radio broadcasting, namely:<sup>66</sup>

- (a) "broadcasting, content and datacasting functions", including regulating broadcasting services; planning the availability of segments of the broadcasting services bands (which are those parts of the spectrum assigned primarily for broadcasting<sup>67</sup>) on an area basis; allocating, renewing, suspending and cancelling licences; conducting investigations or hearings relating to the allocation of licencing for community radio services; designing and administering price-based systems for the allocation of commercial radio broadcasting licences; and advising the responsible Minister on technological advances and service trends in the broadcasting industry; and

---

<sup>65</sup> Section 20, ACMA Act.

<sup>66</sup> Sections 9 and 10, ACMA Act. The remaining aspect of ACMA's functions is the telecommunications functions.

<sup>67</sup> Section 25, Broadcasting Services Act 1992, and section 31, Radiocommunications Act 1992.

---

---

- (b) "spectrum management functions", including managing broadcasting spectrum.

4.3.4 Under the ACMA Act, the responsible Minister may give written directions to ACMA concerning the performance of its functions and the exercise of its powers. Such directions must be published in the Gazette. ACMA must perform its functions and exercise its powers "in a manner consistent with" any of such directions. However, such directions can only be "of a general nature" if they relate to ACMA's "broadcasting, content and datacasting functions" or its powers relating to those functions.<sup>68</sup>

#### Accountability

4.3.5 Under the ACMA Act, ACMA must submit to the responsible Minister an annual report on its operations. The report must include each direction given by the Minister to ACMA relating to the performance of its functions and the exercise of its powers. The Minister must provide the report to the Parliament of Australia.<sup>69</sup>

## **4.4 Allocation of broadcasting spectrum**

4.4.1 ACMA is responsible for radio frequency spectrum management, including spectrum allocation. In managing the spectrum, ACMA is governed by the objectives of the Radiocommunications Act, which include:

- (a) "ensuring the efficient allocation and use of the spectrum" to "maximize the overall public benefit" derived from such use;
- (b) making "adequate provision of the spectrum for use by other public or community services";
- (c) providing a "responsive and flexible approach to meeting the needs of users of the spectrum";
- (d) encouraging "the use of efficient radiocommunication technologies so that a wide range of services of an adequate quality can be provided"; and
- (e) providing an "efficient, equitable and transparent system of charging for the use of spectrum".

---

<sup>68</sup> Section 14, ACMA Act.

<sup>69</sup> Section 57, ACMA Act.

4.4.2 Under the Broadcasting Services Act 1992, ACMA has certain specific spectrum management obligations relating to the planning of broadcasting services bands. In particular, ACMA must prepare a frequency allotment plan that determines the number of channels to be available in particular areas of Australia to provide broadcasting services, including radio broadcasting, using the corresponding parts of the spectrum.

4.4.3 In preparing (or varying) a frequency allotment plan for analogue radio broadcasting services, ACMA must have regard to certain statutory planning criteria, including:<sup>70</sup>

- (a) demographics;
- (b) social and economic characteristics within a licence area (an area designated by ACMA for radio broadcasting under a licence), within neighbouring licence areas and within Australia generally;
- (c) number of existing broadcasting services and demand for new broadcasting services within a licence area, within neighbouring licence areas and within Australia generally;
- (d) developments in technology;
- (e) technical restraints relating to the delivery or reception of broadcasting services; and
- (f) demand for spectrum for services other than broadcasting services.

4.4.4 Under the Radiocommunications Act 1992, a radio broadcasting licensee must obtain an apparatus licence issued by ACMA, which authorizes the operation of one or more specified radio communications transmitters for transmitting the broadcasting service in broadcasting spectrum.<sup>71</sup>

## 4.5 Licensing of radio broadcasting services

4.5.1 ACMA is responsible for licensing radio broadcasting services, including commercial radio broadcasting licences mentioned in the paragraph below and community radio licences mentioned in **paragraphs 4.7.3 to 4.7.7**.

---

<sup>70</sup> Section 23, Broadcasting Services Act 1992. These criteria do not apply to digital radio broadcasting.

<sup>71</sup> Section 102, Radiocommunications Act 1992.



---

---

### Price-based allocation of commercial radio broadcasting licences

4.5.2 Under the Broadcasting Services Act 1992 and the Commercial Broadcasting Licence Allocation Determination No.1 of 1998, ACMA is required to allocate commercial radio broadcasting licences by a price-based licence allocation exercise. ACMA must publish an advertisement to invite applications for the allocation of one or more licences. ACMA may accept an application only if the applicant is a company formed in Australia or an external Territory of Australia and having a share capital. On or before the closing date and time for applications for a licence, ACMA must set a reserve price for the licence. If more than one applicant has applied for the allocation of a particular licence, ACMA must conduct a licence allocation exercise under which the licence will be awarded to the highest bidder. If the bidding does not reach the reserve price, the allocation exercise will be terminated. If there is only one applicant, the licence will be allocated to the applicant at the reserve price.

## **4.6 Broadcasting licence fees**

4.6.1 In order to use broadcasting spectrum, a commercial radio broadcasting licensee must pay an annual broadcasting licence fee to ACMA by 31 December every year. The fee is calculated as a percentage of a licensee's gross earnings for the previous financial period based on a formula set out in the Radio Licence Fee Act 1964.<sup>72</sup> Under the Act, "gross earnings" means a licensee's gross earnings during a financial period from broadcasting of advertisements or other materials by the service or services provided under the licence.<sup>73</sup> In 2005-2006, ACMA collected AUS\$20.3 million (HK\$150 million) from commercial radio broadcasting services. According to ACMA, to preserve confidentiality, licence fees paid by individual licensee are not published.

## **4.7 Efforts to promote public access channels**

4.7.1 ACMA has encouraged the establishment of community radio services to facilitate public access to the airwaves. A community radio is statutorily defined as a broadcasting service that:<sup>74</sup>

- (a) is provided for community purposes;
- (b) is not operated for profit or as part of a profit-making enterprise; and

---

<sup>72</sup> Section 6, Radio Licence Fees Act 1964.

<sup>73</sup> Section 4, Radio Licence Fees Act 1964.

<sup>74</sup> Section 15, Broadcasting Services Act 1992.

- 
- 
- (c) provides programmes that are able to be received by commonly available equipment and are made available free to the general public.

4.7.2 In Australia, the first community radio station was licensed in 1972. The sector has since developed rapidly. As of February 2008, ACMA had granted 353 community radio licences, and 343 community radio services were in operation. More than 70% of community radio stations were in rural, regional and remote areas. A recent research commissioned by the Community Broadcasting Association of Australia, the national representative organization for community broadcasters, found that 25% of Australians aged 15 or above, or about four million people, listened to community radio in a typical week. Of these listeners, 34% did not listen to commercial radio, 46% did not listen to ABC (Australia Broadcasting Corporation) or SBS (Special Broadcasting Service) radio,<sup>75</sup> and 17% did not listen to either commercial radio or ABC/SBS radio, i.e. about 4% of Australians aged 15 or above, or 685 000 people, were exclusive listeners to community radio in a typical week.

### Licensing

4.7.3 ACMA is responsible for licensing community radio services. ACMA may only accept applications from "companies that are formed in Australia or in an external Territory, and represent a community interest".<sup>76</sup> These companies are regarded as "suitable applicants" for such licences.<sup>77</sup> A suitable company may apply for a renewable long-term licence or a non-renewable temporary licence.

### *Allocating long-term licences on a merit basis*

4.7.4 ACMA considers applications for a long-term community radio licence on a merit basis. The responsible Minister may give directions to ACMA to give priority to a particular community interest or interests, whether generally or in a particular licence area, in allocating community licences. In deciding whether to allocate such a licence for a community, ACMA must have regard to:<sup>78</sup>

- (a) extent to which the proposed service would meet the existing and future needs of the community within the licence area;
- (b) nature and diversity of the interests of the community;
- (c) nature and diversity of other broadcasting services (including national broadcasting services) available within the licence area;

---

<sup>75</sup> ABC and SBS are national public broadcasters in Australia.

<sup>76</sup> Section 80 (1), Broadcasting Services Act 1992.

<sup>77</sup> Sections 80 and 92(C), Broadcasting Services Act 1992.

<sup>78</sup> Section 84 (2), Broadcasting Services Act 1992.

- 
- 
- (d) applicant's capacity to provide the proposed service or services;
  - (e) undesirability of one person being in a position to exercise control of more than one community broadcasting in the same licence area; and
  - (f) undesirability of the federal government, a State or a Territory or a political party being in a position to exercise control of a community radio licence.

4.7.5 At its discretion, ACMA may hold a public hearing to assess the comparative merits of applicants. It is a licence condition that the licensee commences its broadcasting service within one year of being allocated the licence or a longer period as notified by ACMA.<sup>79</sup> A licence remains in force for five years.<sup>80</sup>

*Allocating temporary licences to help broadcasters build community support*

4.7.6 Before undertaking any merit-based allocation of a long-term community radio licence, ACMA may allocate temporary community radio licences to suitable applicants for up to 12 months. Such licences aim at allowing aspiring community radio broadcasters to develop their operational and programming skills, and helping them build community support for long-term community broadcasting services.

4.7.7 Generally, the allocation of temporary community radio licences is not merit-based. In deciding whether to allocate such a licence, ACMA is only required to take into account criteria (e) and (f) but not criteria (a) to (d) mentioned in **paragraph 4.7.4**.<sup>81</sup> If there is more than one valid application for such a licence on a particular frequency, ACMA may issue more than one of such licences. In such cases, the licensees must share broadcasting time on the spectrum according to timing conditions determined by ACMA.<sup>82</sup>

---

<sup>79</sup> A community radio licence is subject to a licence condition that the licensee must continue to represent the community interest that it represented at the time when the licence was allocated or was last renewed. The transfer of such licences is allowed under certain circumstances. For instance, the licensee concerned may want to merge with another company or hand over the licence to another company if it does not have the financial capacity to continue broadcasting. ACMA may only approve the transfer if the transfer represents a community interest, and the proposed transferee is a company formed in Australia or in an external Territory.

<sup>80</sup> Section 89, Broadcasting Services Act 1992.

<sup>81</sup> Section 92E, Broadcasting Services Act 1992.

<sup>82</sup> ACMA (2008).

---

---

### Guidance on operation and programming

4.7.8 Community radio broadcasting licensees are obliged to operate according to the Community Broadcasting Codes of Practice, which are developed by organizations representing the community radio industry "in consultation with" ACMA and "taking into account of any relevant research" conducted by ACMA.<sup>83</sup>

4.7.9 The Codes require community radio services to operate according to certain principles, including:

- (a) having policies and procedures to "ensure access and equity and encourage participation by those not adequately served by other media";
- (b) promoting accuracy and fairness in news and current affairs programmes, such as providing access to views under-represented by the mainstream media;
- (c) preventing the contents and style of individual programmes and the overall programming of the services from being influenced by sponsors; and
- (d) acknowledging the rights of their audiences to comment and make complaints concerning compliance with the Codes or licence conditions, programme contents and the general service provided to the community; making every reasonable effort to resolve complaints; and maintaining a record of complaints (for a period of at least two years) made available to ACMA on request.

### Financial support

4.7.10 While the community radio broadcasting sector is largely self-funded, the federal government has established the Community Broadcasting Foundation (CBF) to provide some funding support to the sector. CBF is a government-funded non-profit-making agency. It aims at assisting community radio "to reach its full potential as a well-resourced, independent, diverse, vibrant and accessible Australian media sector".<sup>84</sup> It has more than 20 targeted granting programmes, supporting the operational and development costs of the community broadcasting sector in various aspects, such as programme production, station infrastructure, training, co-ordination and research.<sup>85</sup>

---

<sup>83</sup> Section 123 (1), Broadcasting Services Act 1992.

<sup>84</sup> Community Broadcasting Foundation (2008).

<sup>85</sup> Ibid.

---

---

## 4.8 Development of digital radio broadcasting

4.8.1 In Australia, the federal government has set 1 January 2009 as the official launch date for DRB in the six State capitals of Sydney, Melbourne, Brisbane, Adelaide, Perth and Hobart. Services for regional Australia are expected to follow soon afterwards.

4.8.2 While the federal government has adopted the Eureka-147 system, which is currently the most widely deployed technology for digital radio internationally, as the primary technology platform for DRB on broadcasting services bands in Australia, it will consider the feasibility of adopting newer versions of the technology. Nevertheless, the government will also monitor developments in other DRB technologies, including Digital Radio Mondiale (DRM), which is not a widely deployed technology, to determine what supplementary platforms might be appropriate to address regional and remote coverage issues that cannot be solved by Eureka-147.

### Implementation strategy

4.8.3 Under the government's Digital Radio Policy Framework issued in October 2005, the government will adopt the following strategy to introduce DRB:

- (a) DRB will supplement existing analogue radio services for a considerable period and may never be a complete replacement.<sup>86</sup> In addition, analogue radio broadcasters are not required to simulcast<sup>87</sup> their analogue services in digital format;
- (b) the initial rollout of DRB will focus on providing the spectrum to existing licensees for State capital commercial, national and wide-coverage community broadcasters, while such rollout in regional areas will commence at a later stage;
- (c) a moratorium will be introduced on the issue of new commercial DRB licences for a period of six years, following the introduction of DRB services in State capital markets; and
- (d) DRB services will be subject to existing content regulation arrangements administered by ACMA applying to analogue radio services (including codes of practice, standards and licence conditions).

---

<sup>86</sup> According to Digital Radio Broadcasting Australia Pty Ltd, which is a consortium of Commercial Radio Australia (the peak industry body representing 98% of commercial stations in Australia), ABC Radio and SBS Radio established in 2003 to run the Sydney digital radio trial, it is expected that AM and FM radio services will continue for at least 20 years to provide consumers with adequate time to replace their radios with digital receivers.

<sup>87</sup> Simulcasting means the broadcasting of a programme on more than one transmission technology.

## Chapter 5 – United States

### 5.1 Major types of radio broadcasting services

5.1.1 In the US, as of December 2007, there were more than 14 800 radio broadcasting stations, including:<sup>88</sup>

- (a) about 6 300 FM commercial stations;
- (b) about 2 900 non-commercial educational (NCE) FM stations, which generally meet their operating expenses with contributions from listeners or government funding; and
- (c) about 4 700 AM stations which can provide either commercial or educational services.

### 5.2 Government's radio broadcasting policy

5.2.1 As set out in the Communications Act of 1934 as amended (CA1934), the federal government's broadcasting policy, which covers radio broadcasting, aims at "regulating interstate and foreign commerce in communication by wire and radio so as to make available, so far as possible, to all the people of the United States, without discrimination on the basis of race, color, religion, national origin or sex, a rapid, efficient, nation-wide and world-wide wire and radio communication service with adequate facilities at reasonable charges".<sup>89</sup> Consistent with these purposes, the Federal Communications Commission (FCC) has identified a number of strategic goals covering the regulation of radio broadcasting, including:<sup>90</sup>

- (a) fostering innovation and offering consumers reliable and meaningful choices and affordable services;
- (b) promoting efficient and effective use of non-federal spectrum domestically, and the growth and rapid deployment of innovative and efficient communications technologies and services; and
- (c) promoting competition and diversity, and facilitating the transition to digital modes of delivery.

---

<sup>88</sup> Federal Communications Commission (2008).

<sup>89</sup> Section 1, CA1934.

<sup>90</sup> Federal Communications Commission (2007) p.6.

### 5.3 Regulatory authority of radio broadcasting services

5.3.1 FCC, a federal government agency established under CA1934, is responsible for regulating radio broadcasting services in the US.

#### Appointment

5.3.2 FCC comprises five Commissioners appointed by the US President, by and with the advice and consent of the Senate of the US Congress, with one of them being designated by the President as the Chair of FCC.<sup>91</sup>

#### Statutory duties and powers

5.3.3 In general, FCC is responsible for executing and enforcing CA1934. In particular, FCC has powers to perform a wide range of statutory duties, "as public convenience, interest or necessity requires", including:<sup>92</sup>

- (a) classifying radio stations and prescribing the nature of services to be provided by such stations;
- (b) allocating spectrum and assigning frequency bands to the various classes of radio stations, assigning frequencies for each station, and determining the power that can be used by each station and the time during which it may operate;
- (c) prescribing the qualifications of radio station operators, classifying them according to their duties to be performed, and issuing licences to qualified station operators; and
- (d) studying new uses for radio, providing for experimental uses of frequencies, and generally encouraging a larger and more effective use of radio in the public interest.

---

<sup>91</sup> Section 4(a), Communications Act of 1934.

<sup>92</sup> §303, U.S. Code.

---

---

### Accountability

5.3.4 FCC is directly responsible to Congress. It is required to make an annual report to Congress. The report must include information considered by FCC as valuable in the determination of questions relating to the regulation of radio communication and transmission, and information on the functioning of FCC, which will be valuable to Congress in appraising the amount and character of FCC's works and accomplishments.

## **5.4 Allocation of broadcasting spectrum**

5.4.1 FCC is responsible for managing broadcasting spectrum used by radio broadcasters. FCC's spectrum management must be consistent with the "public interest, convenience or necessity". According to FCC, the "public interest" principle has been the primary criterion for spectrum management. In the US, the right to access broadcasting spectrum and the right to provide broadcasting services are granted in one package. As such, any person or organization may apply for a radio broadcasting licence to access a particular part of broadcasting spectrum.

## **5.5 Licensing of radio broadcasting services**

5.5.1 In the US, radio broadcasting spectrum is divided into "reserved" and "non-reserved" channels. The reserved channels are for NCE use solely, while the non-reserved channels are for all types of broadcasting, commercial and non-commercial. FCC is responsible for licensing radio services for either NCE or commercial. Owing to the finite nature of and strong demand for broadcasting spectrum, FCC often cannot allocate a broadcasting licence to every qualified applicant. As such, FCC has frequently selected among multiple applicants through two mechanisms, namely the point system for NCE radio licences and auctions for commercial radio licences.

### Point system for non-commercial educational radio licences

5.5.2 If there are "mutually exclusive" applicants for an NCE station, i.e. interference would be created between stations when all applications were to be granted, FCC will select the most suitable applicant through a point system. Under the system, FCC establishes certain criteria and assigns points to them, and evaluates applications against those criteria. The application with the highest score will be awarded a licence.



---

5.5.3 Nevertheless, before resorting to the point system, FCC generally uses the principle of "fair distribution of service" to select the most suitable applicant. Under the principle, an application providing a NCE service for the first time (first NCE service), which is received by a comparatively large population, will be preferred over another providing a first NCE service, which is received by a significantly smaller population. Similarly, an application which does not provide any significant first NCE service but provides a second NCE service, which is received by a comparatively large population, will be preferred over another such proposal providing a second NCE service, which is received by a significantly smaller population.<sup>93</sup>

5.5.4 If FCC fails to select the most suitable applicant using the principle of fair distribution of service, it will apply the point system to the competing applications. Specifically, it awards points to an applicant meeting certain criteria, including:<sup>94</sup>

- (a) "diversity of ownership", i.e. the principal community contour of the applicant's proposed service does not overlap with the principal community contour of any other NCE or commercial station;
- (b) "technical parameters", i.e. the applicant's proposed service covers the largest area and population, provided that it covers at least 10% greater area and 10% greater population than the next best technical proposal; and
- (c) "localism", i.e. the applicant's proposed service has its headquarters established, or 75% of its board members residing, within 25 miles of the reference co-ordinates of the centre of the community to be served.

5.5.5 If any applicants are tied in the score, FCC will apply "tie-breakers" to settle the competition. As a primary tie-breaker, FCC will award the licence to the applicant with the fewest existing same service licences and permits when filing the application. If any applicants are still tied, as a secondary tie-breaker, FCC will award the licence to the applicant with the fewest pending applications when filing the application for the licence.

---

<sup>93</sup> Federal Communications Commission (2000) and (2001).

<sup>94</sup> Federal Communications Commission (2000).

### Auction for commercial radio licences

5.5.6 Since 1994, FCC has been authorized by the Omnibus Budget Reconciliation Act to use auctions to choose from among two or more mutually exclusive applicants for a commercial radio licence. Before 1994, FCC mainly relied on comparative hearings and lotteries to select a single licensee from a pool of mutually exclusive applicants. According to FCC, auctions assign licences more effectively than either comparative hearings or lotteries. By using auctions, FCC has reduced the average time from application to licence grant to less than one year.<sup>95</sup>

### Public participation in the licensing process

5.5.7 Under FCC's rules, an applicant for NCE or commercial radio licences must afford an opportunity for the public to file comments with FCC on his or her application. The applicant must maintain a file available for public inspection. The file must include:<sup>96</sup>

- (a) copies of the application filed with FCC and public notice announcements on the application;
- (b) citizen agreements, if any, made between the applicant and local listeners on programming, employment or other issues of community concern;
- (c) the proposed service contour maps;
- (d) ownership reports and related materials, which include interests held by the applicant in other radio broadcast stations; and
- (e) contracts required to be filed with FCC, including contracts relating to network service and ownership of the applicant, and management consultant agreements and station management contracts.

---

<sup>95</sup> Federal Communications Commission (2008).

<sup>96</sup> Sections 73.3526 and 73.3527, 47, Code of Federal Regulations.

---

---

---

---

## 5.6 Broadcasting licence fees

5.6.1 In the US, radio broadcasting licensees are required to pay annual "regulatory fees" instead of licence fees to FCC. Non-profit entities (as well as government entities) holding radio broadcasting licences are exempt from such fees. Under CA1934, FCC is responsible for assessing and collecting such fees to "recover the costs" of its regulatory activities, including policy and rule-making activities, enforcement activities, user information services and international activities.<sup>97</sup> In 2007-2008, the annual regulatory fees for AM radio licensees range from US\$200 (HK\$1,560) to US\$900 (HK\$7,020), while those for FM radio licensees range from US\$600 (HK\$4,680) to US\$900 (HK\$7,020).<sup>98</sup>

5.6.2 Under CA1934, FCC may adjust such fees proportionately to reflect changes in the amount appropriated for the performance of its regulatory activities for every fiscal year. Such adjustments are not subject to judicial review.<sup>99</sup>

## 5.7 Efforts to promote public access channels

5.7.1 FCC has introduced since 2000 the licensing of a new Low Power FM (LPFM) radio service to facilitate public access to the airwaves. LPFM is non-commercial and educational in nature serving local communities or under-represented groups within communities, but it is not under the category of NCE radio as defined in paragraph 5.5.1. According to FCC, the creation of such radio service aims at "encouraging diverse voices on the nation's airwaves and creating opportunities for new entrants in broadcasting".<sup>100</sup> FCC expects the service to meet needs unmet by commercial radio services.

5.7.2 The LPFM radio service comprises two types of FM radio stations:

- (a) 100 watt stations, which operate at a maximum power of 100 watts reaching areas with a radius of about three and a half miles; and
- (b) 10 watt stations, which operate at a maximum power of 10 watts reaching areas with a radius of between one and two miles.

---

<sup>97</sup> §159, CA1934.

<sup>98</sup> Ibid.

<sup>99</sup> Ibid.

<sup>100</sup> Federal Communications Commission (2000) p.8.

---

5.7.3 These LPFM stations are in contrast to existing full power commercial FM radio stations, which generally operate at between 6 000 watts and 100 000 watts. By the end of 2007, some 831 LPFM stations were operating.<sup>101</sup>

### Licensing

5.7.4 Any organization wishing to operate the LPFM radio service is required to apply for a licence from FCC. Individuals are not eligible to apply for the licence. Given the non-commercial and educational nature of the service, eligible applicants must be government or non-profit educational institutions, non-profit organizations with educational purposes, or government or non-profit entities providing local public safety or transportation services.

5.7.5 In addition, eligible applicants must be based in the community where they intend to broadcast. An organization is considered community-based if, among others, it is headquartered within 10 miles of the proposed transmitting antenna; 75% of its board resides within 10 miles of the proposed transmitting antenna; or it is a non-profit or government public safety organization that intends to broadcast within the area of its jurisdiction.

5.7.6 Since the LPFM service is designed to create opportunities for new voices to be heard on the radio, existing broadcasters, cable television system operators or daily newspaper publishers, or any principals or officers of such organizations, are not eligible for LPFM licences.

5.7.7 LPFM licences are allocated by a point system, under which points are awarded to an applicant with a plan to have the proposed radio station operating in the community for at least two years, and a commitment to broadcast at least 12 hours per days and to provide at least eight hours of locally originated programming each day.

## **5.8 Development of digital radio broadcasting**

5.8.1 In 1990, FCC first considered the feasibility of introducing DRB in the US. In 2002, FCC announced to launch DRB using the In-Band, On-Channel (IBOC) technology.<sup>102</sup> As of March 2007, more than 1 272 stations (195 AM and 1 077 FM) were authorized by FCC to provide DRB. These stations are mostly located in the top 50 markets in the US and have reached 60% of all potential listeners.

---

<sup>101</sup> Federal Communications Commission (2008).

<sup>102</sup> Federal Communications Commission (2007) p.33.

---

5.8.2 FCC adopts IBOC as the only transmission standard for DRB. IBOC can transmit near-CD quality audio signals to radio receivers along with new data services. These signals eliminate the static, hiss, pops and fades associated with the current analogue radio system. According to FCC, IBOC can allow AM and FM radio broadcasters to introduce digital operations "efficiently and rapidly", without disruption of their existing analogue service.<sup>103</sup> The use of IBOC is inherently less costly than other DRB systems in that radio broadcasters can implement IBOC using their existing towers, antennas and transmission line.<sup>104</sup> FCC did not select the Eureka-147 system as the transmission standard for DRB because, in contrast to IBOC, Eureka-147 had no active domestic proponent and no appreciable support within the broadcasting industry in the US. In addition, Eureka-147 would "require significant broadcaster investments" in new transmission facilities, "impose major service area changes on existing broadcasters", and require the allocation of additional spectrum for radio broadcasting.<sup>105</sup>

#### Implementation strategy

5.8.3 FCC adopts IBOC as a single DRB transmission standard because it considers that the technology can "facilitate an efficient and orderly transition to digital radio", especially when broadcasters face competitive challenges from various digital media and many station owners link their continued viability to the prompt introduction of a digital transmission technology. In addition, setting a single transmission standard can facilitate regulatory clarity and compress the time frame for finalizing the rules and policies for DRB.<sup>106</sup>

5.8.4 Meanwhile, FCC advocates interim and voluntary digital broadcasting operations for AM and FM radio service licensees, instead of imposing a mandatory conversion schedule for such licensees, to commence DRB. According to FCC, only broadcasters wishing to begin DRB need comply with any notification or technical requirements from FCC. Those broadcasters choosing not to initiate such digital operations will not be affected and therefore will not be compelled to incur any new costs.

---

<sup>103</sup> Federal Communications Commission (2002) pp.1-2.

<sup>104</sup> Federal Communications Commission (2002) p.13 and p.19.

<sup>105</sup> Federal Communications Commission (2002) p.2.

<sup>106</sup> Federal Communications Commission (2002) p.17.

## Chapter 6 – Analysis

### 6.1 Introduction

6.1.1 Based on the findings in the previous chapters, this chapter highlights the following aspects to facilitate Members' deliberation on the regulation of radio broadcasting other than public service broadcasting in Hong Kong:

- (a) government's radio broadcasting policy;
- (b) licensing of radio broadcasting services;
- (c) public participation in the licensing process;
- (d) broadcasting licence fees;
- (e) development of community radio; and
- (f) development of digital radio broadcasting (DRB).

6.1.2 To facilitate Members' discussion, the **Appendix** compares the main features of the regulation of radio broadcasting in the four selected places and Hong Kong.

### 6.2 Government's radio broadcasting policy

#### Radio broadcasting policies set out in legislation

6.2.1 In Canada, Australia and the US, the government has its broadcasting policy or policy objectives covering radio broadcasting set out in legislation explicitly. The Canadian government's broadcasting policy is mainly set out in the Broadcasting Act 1991, and the Australian government's broadcasting policy is mainly set out in the Broadcasting Services Act 1992. In the US, the purposes of the federal broadcasting policy are mainly set out in the Communications Act of 1934 as amended. In the UK, although the broadcasting policy is not spelt out in the enabling legislation, the responsible authority has formulated a comprehensive strategic policy framework to advance its broadcasting objectives, including the development and regulation of radio broadcasting.

6.2.2 In Hong Kong, the Government does not set out its radio broadcasting policy in legislation. The broadcasting policy and the relevant policy objectives are specified in various documents of the Government and the statutory Broadcasting Authority (BA) established under the Broadcasting Authority Ordinance (Cap 391).

#### Policies to enhance diversity of radio broadcasting services

6.2.3 All selected places emphasize diversity of radio broadcasting services, including the promotion of more choices of services other than commercial and public service broadcasting.

6.2.4 In Canada, radio broadcasting services must comprise not only public and private elements but also community elements. Their programming should include community programmes and a significant contribution from the Canadian independent production sector. In the UK, the government has set out certain public purposes for radio broadcasting, which include sustaining citizenship and civil society, and promoting social gain. Its radio broadcasting policy must take into account the importance of plurality of radio broadcasting services and the need to encourage the development of a thriving community radio sector. In Australia, the federal government must make adequate provision of broadcasting spectrum for use by community services. In the US, the responsible regulatory authority has set strategic goals to promote competition and diversity, and to offer meaningful choices to consumers.

6.2.5 In Hong Kong, the Government's broadcasting policy has specified certain objectives relating to the promotion of diversity of radio broadcasting services, including widening programming choice to cater for the diversified tastes and interests of the community, and ensuring fair and effective competition in the provision of broadcasting services.<sup>107</sup> However, such objectives do not cover the promotion of community radio.

---

<sup>107</sup> Broadcasting Authority (2008).

### 6.3 Licensing of radio broadcasting services

#### Authority responsible for granting licences

6.3.1 In all selected places, the granting of radio broadcasting licences is determined by a statutory authority. The corresponding statutory authorities are the Canadian Radio-television and Telecommunications Commission (CRTC) established by the CRTC Act; the Office of Communications (Ofcom) established by the Ofcom Act 2002 in the UK; the Australian Communications and Media Authority (ACMA) established by the ACMA Act; and the Federal Communications Commission (FCC) established by the Communications Act of 1934 as amended in the US.

6.3.2 Generally, these statutory authorities may determine the granting of licences on their own. In particular, in Australia, while the responsible Minister may give written directions to ACMA concerning the performance of its functions and the exercise of its powers, such directions can only be of a general nature if they relate to ACMA's broadcasting functions, including the granting of licences.

6.3.3 Among the statutory authorities responsible for granting licences, only the US's FCC reports directly to Congress, with its Commissioners being appointed by the US President by and with the advice and consent of the Senate of Congress. The other three authorities are required to report to the legislature through the responsible Minister.

6.3.4 In Hong Kong, BA is responsible for considering applications for radio broadcasting licences and making recommendations to the Chief Executive-in-Council on those applications.<sup>108</sup> However, it does not have statutory power to grant licences. Such power rests with the Chief Executive-in-Council.<sup>109</sup>

#### Methods for determining the granting of licences

6.3.5 The methods adopted by the four selected places for determining the granting of radio broadcasting licences are somewhat different.

6.3.6 In Canada, the granting of commercial and community radio licences is determined by CRTC after assessing applications for such licences against certain statutory criteria and holding public hearings on those applications.

---

<sup>108</sup> Section 13B (1), Telecommunications Ordinance.

<sup>109</sup> Section 13C(1) and (2), Telecommunications Ordinance.



---

6.3.7 In the other three selected places, the responsible authorities use different methods to allocate different types of licences. In the UK, a national analogue commercial radio licence is normally awarded to the highest bidder under a cash bid process, while a local analogue commercial radio licence or community radio licence is awarded through an open competition to the applicant who best meets the relevant statutory criteria. In Australia, a commercial radio licence is awarded to the highest bidder under a price-based licence allocation exercise, while a long-term community radio licence is allocated to the applicant with more comparative merits. In the US, a commercial radio licence is awarded by auction, while a non-commercial educational (NCE) radio licence is granted to the applicant who best meets certain licensing criteria under a point system.

6.3.8 In Hong Kong, the responsible authority, the Chief Executive-in-Council, uses neither auctions nor a point or merit system to grant a licence. Before deciding on an application for a licence, it will take into account certain factors, including the feasibility of the applicant's technical proposal on the use of broadcasting spectrum, and the applicant's management, financial and technical capabilities to establish and maintain a broadcasting service.<sup>110</sup>

#### Licensing criteria

6.3.9 All selected places have explicit statutory criteria to assess applications for radio broadcasting licences, except those allocated by auction or a price-based allocation exercise.

6.3.10 In Canada, CRTC must assess applications for commercial or community licences against certain minimum criteria relating to Canadian ownership, financing, technical capacity and programming requirements. In addition, CRTC may require an applicant to conduct a market study to confirm the demand for the proposed service and show how it would increase diversity in the market. The market study must also address the possible effect of the proposed service on existing broadcasters.

6.3.11 In the UK, Ofcom must follow certain statutory criteria to assess applications for local analogue commercial radio licences or community licences. Such criteria relate to an applicant's ability to maintain the proposed service and to cater for the tastes and interests of target listeners, the broadening of choices of programmes and evidence of demand for the proposed service.

6.3.12 In Australia, when allocating a long-term community licence on a merit basis, ACMA must have regard to certain statutory criteria, including whether the applicant would meet the existing and future needs of the community to be served, and the nature and diversity of other broadcasting services available within that community.

---

<sup>110</sup> Commerce, Industry and Technology Bureau (2006) p.2.

6.3.13 In the US, under its point system for granting NCE radio licences, FCC must evaluate applicants against certain criteria relating to their diversity of ownership, their proposed services' coverage of area and population, and their links with the community to be served.

6.3.14 In Hong Kong, the Telecommunications Ordinance (Cap 106) stipulates that a radio broadcasting licence may only be granted to a corporation that is a company formed and registered in Hong Kong under the Companies Ordinance; not a subsidiary; and empowered under its memorandum of association to comply fully with the provisions of the Telecommunications Ordinance and the terms and conditions of its licence.<sup>111</sup> The Chief Executive-in-Council may consider factors mentioned in **paragraph 6.3.8** before deciding on an application for a licence.<sup>112</sup>

## **6.4 Public participation in the licensing process**

6.4.1 Among the four selected places, both Canada and the US have statutory arrangements for members of the public to participate in the licensing process for radio broadcasting.

6.4.2 In Canada, CRTC must hold a public hearing on an application, or competing applications, for a radio broadcasting licence. The hearing must be announced in the Canada Gazette at least 60 days before the hearing. Members of the public may provide written comments on the application(s). Anyone providing written comments on the application(s) may be asked to appear at the hearing to provide further information. In addition, members of the public may petition the Governor in Council<sup>113</sup> to urge CRTC to hold a hearing to reconsider its decision to issue a licence.

6.4.3 In the US, an applicant for NCE or commercial radio licences must afford an opportunity for the public to file comments with FCC on the application. The applicant must maintain a file available for public inspection. The information in the file must include copies of the application filed with FCC and public notice announcements on the application; citizen agreements, if any, made between the applicant and local listeners on programming, employment or other issues of community concern; and ownership reports including interests held by the applicant in other radio stations.

6.4.4 In Australia, when considering applications for a long-term community radio licence on a merit basis, ACMA may hold a public hearing to assess the comparative merits of such applications. Nonetheless, this is not a mandatory requirement. On the other hand, the UK is not required to hold a public hearing to consider applications for radio broadcasting licences.

---

<sup>111</sup> Section 13F, Telecommunications Ordinance.

<sup>112</sup> Commerce, Industry and Technology Bureau (2006) p.2.

<sup>113</sup> The Governor in Council means the Governor General of Canada, the head of state, acting on and with the advice of the Federal Cabinet led by the Prime Minister, the head of government.

---

6.4.5 In Hong Kong, when considering an application for a radio broadcasting licence and preparing recommendations on it, BA is not obliged to hold a public hearing on the application. The current practice is that upon receipt of BA's recommendations, the Government may convey BA's recommendations to the applicant and the Government's views on them, and asked if the applicant wishes to make any representation on such recommendations to the Chief Executive-in-Council. Before deciding on the application, the Chief Executive-in-Council will consider all the views and recommendations from BA, the representations from the applicant in response to BA's recommendations, and the Government's views.<sup>114</sup>

## **6.5 Broadcasting licence fees**

6.5.1 In all selected places, radio broadcasting licensees are generally required to pay broadcasting licence fees to the responsible authorities, with such fees being calculated on the basis of cost recovery.

6.5.2 In Canada, the annual broadcasting licence fee is divided into two parts. The Part I licence fee is based on the broadcasting regulatory costs incurred each year by CRTC and other federal departments or agencies, excluding spectrum management costs. The Part II licence fee is based on a licensee's fee revenue for a financial year. CRTC collects Part II licence fees on behalf of the federal government. Such fees are intended to, among others, earn a fair return for the Canadian public for licensees' use of broadcasting spectrum and recover the costs of the federal government's management of broadcasting spectrum.

6.5.3 In the UK, the annual fee for a national or local commercial analogue radio licence is calculated as a percentage of the licensee's revenues (exclusive of value added tax) derived from the provision of the licensed service. The annual fees for all other types of radio licences are set at a fixed rate. The basic principle of setting licence fees is to meet the cost of Ofcom's functions relating to the regulation of broadcasting.

6.5.4 In Australia, the annual broadcasting licence fee paid by a commercial radio broadcasting licensee to ACMA is calculated as a percentage of the licensee's gross earnings for the previous financial period based on the formula set out in legislation.

6.5.5 In the US, radio broadcasting licensees are generally required to pay annual regulatory fees instead of licence fees to FCC. Non-profit entities (as well as government entities) holding radio broadcasting licences are exempt from such fees. Set at a fixed rate in legislation, such fees are to recover the costs of FCC's regulatory activities.

---

<sup>114</sup> Commerce, Industry and Technology Bureau (2006) p.2.

6.5.6 In Hong Kong, the annual licence fee payable by a radio broadcasting licensee is to reflect the costs incurred by relevant regulatory authorities concerning the licence administration work.<sup>115</sup>

## **6.6 Development of community radio**

6.6.1 All selected places have witnessed a significant growth of community radio to enhance public access to the airwaves. In Canada, where 105 community radios are broadcasting, CRTC has formulated a specific policy framework to promote community radio since 1992. In the UK, where about 80 community radio services are broadcasting, Ofcom has invited applications for community radio licences since 2004. In Australia, where more than 340 community radio services are broadcasting, the federal government has allowed the establishment of community radio services since 1972. In the US, FCC has introduced since 2000 a new type of radio service called Low Power FM (LPFM), which provides non-commercial and educational broadcasting services. At present, more than 830 LPFM stations are broadcasting.

### Statutory status

6.6.2 All selected places have legislation or government policies recognizing the values and functions of community radio services, governing their licensing regime and regulating their operation.

### Measures to promote diversity of community radio

6.6.3 All selected places have measures promoting diversity of community radio. In Canada, CRTC has encouraged the establishment of a type of community radio called low-power developmental community stations to serve as a training ground for newcomers for the future establishment of higher power community stations. In the UK, community radio must adhere to certain statutory ownership requirements. For instance, Ofcom may not grant a community radio licence to an applicant with a proposal of receiving from any one source more than 50% of the income in a financial year to provide the proposed service. In Australia, ACMA may allocate temporary 12-month community radio licences (instead of five-year long-term licences) to help aspiring community radio broadcasters to build community support for long-term community broadcasting services. In the US, since LPFM is designed to create opportunities for new voices to be heard on the radio, existing broadcasters, cable television system operators or daily newspaper publishers are not eligible for LPFM licences.

---

<sup>115</sup> Television and Entertainment Licensing Authority (2006).

---

---

---

---

### Financial support for community radio

6.6.4 Among the four selected places, both the UK and Australian governments have provided financial support for community radio. In the UK, the government has provided up to £500,000 (HK\$7.7 million) every year for the Community Radio Fund, through which community radio licensees may apply for financial support. The Fund aims at helping fund the core works involved in running a community radio station, such as fundraising activities, administration, management and community outreach. In Australia, the federal government has established the Community Broadcasting Foundation to subsidize the community radio sector. The Foundation is a government-funded non-profit-making agency aimed at assisting community radio to reach its full potential as a well-resourced, independent, diverse, vibrant and accessible Australian media sector.

6.6.5 In Hong Kong, there are neither public access channels nor community channels for radio broadcasting. Only commercial radio licensees (currently the Hong Kong Commercial Broadcasting Company Limited and the Metro Broadcast Corporation Limited) and the public broadcaster, Radio Television Hong Kong, are given the right to use broadcasting spectrum for operating radio channels. The Government has not assigned any broadcasting spectrum for community use or for certain social groups. In its Report on Review of Public Service Broadcasting in Hong Kong published in 2007, the Chief Executive-appointed Committee on Review of Public Service Broadcasting considers that public access broadcasting, "if provided, should have regard to spectrum efficiency, especially as its primary objective of providing an open forum for public expression of opinions should be met at least by public service broadcasting".<sup>116</sup> In addition, the Committee considers that given the "high penetration" of free radio services in Hong Kong and a "small and relatively homogeneous population", "there is no apparent case for funding community broadcasting with public money".<sup>117</sup>

---

<sup>116</sup> Committee on Review of Public Service Broadcasting (2007) p.71.

<sup>117</sup> Ibid.

## **6.7 Development of digital radio broadcasting**

6.7.1 In the four selected places, radio broadcasters are in different stages of digitalization. Both Canada and the UK launched DRB in 1995. In Canada, CRTC initially adopted the European Eureka-147 system (which is also adopted by the UK and Australia) as a technical standard for DRB, and attempted to use DRB as a replacement technology for analogue services. However, CRTC has been revising its DRB policy, owing to the slowing down of DRB rollout in recent years. CRTC has no longer deemed DRB as a replacement technology for analogue services. It is considering adopting the In-Band-On-Channel (IBOC) technology, instead of Eureka-147, as a transmission standard for DRB in Canada, because the IBOC technology can allow broadcasters to transmit digitally on their existing channel assignments while maintaining their analogue services. Unlike Canada, the UK has witnessed a significant growth in digital radio listeners in recent years for several reasons, including the high take-up of digital television, which offers digital radio, and the innovation and risk-taking by a number of smaller UK radio manufacturers.

6.7.2 In the US, with the IBOC technology being adopted as a single transmission standard for DRB in 2002, FCC has advocated interim and voluntary DRB for analogue service licensees to commence DRB, instead of imposing a mandatory conversion schedule for such licensees. Australia is the only selected place which has not launched DRB. The federal government has set 1 January 2009 as the official launch date for DRB in six State capitals. Nevertheless, under the government's DRB plan, DRB will supplement existing analogue radio services for a considerable period and may never be a complete replacement.

6.7.3 In Hong Kong, tests on digital transmission using Eureka-147 in Band III (a range of frequencies generally extending from 170 MHz up to 230 MHz) are still underway. The Government has maintained its view that the introduction of DRB services should be market-driven.

## Appendix

## Regulation of radio broadcasting services in selected places and Hong Kong

	Hong Kong	Canada	United Kingdom	Australia	United States
Major enabling legislation	Broadcasting Ordinance and Telecommunications Ordinance.	Broadcasting Act 1991.	Communications Act 2003 and Broadcasting Act 1990 as amended.	Broadcasting Services Act 1992.	Communications Act of 1934 as amended.
Whether the government's radio broadcasting policy is set out in legislation	No, the broadcasting policy and the relevant policy objectives are specified in various documents of the Government and the Broadcasting Authority (BA).	Yes, the national broadcasting policy covering radio broadcasting is mainly set out in the Broadcasting Act 1991.	No, but the United Kingdom (UK) government has formulated a strategic policy framework for the development and regulation of radio broadcasting, which is mainly specified in the policy document, "Radio – Preparing for the future".	Yes, the national broadcasting policy covering radio broadcasting is mainly set out in the Broadcasting Services Act 1992.	Yes, the purposes of the national broadcasting policy covering radio broadcasting are set out in the Communications Act of 1934 as amended.
Policies promoting diversity of radio broadcasting services	The Government's broadcasting policy has certain objectives relating to the promotion of diversity of radio broadcasting services, but such objectives do not include community radio.	Radio broadcasting services must comprise not only public and private elements but also community elements, including a significant contribution from the Canadian independent production sector.	The public purposes for radio broadcasting must include the promotion of civil society and social gain, which can be advanced by a thriving community radio sector.	The national broadcasting policy must make adequate provision of broadcasting spectrum for use by community services.	To implement the Communications Act of 1934 as amended, the responsible regulatory authority has set strategic goals to promote competition and diversity, and to offer meaningful choices to consumers.

## Appendix (cont'd)

## Regulation of radio broadcasting services in selected places and Hong Kong

	Hong Kong	Canada	United Kingdom	Australia	United States
Authority responsible for granting radio broadcasting licences	<p>The Chief Executive-in-Council is responsible for granting licences.</p> <p>The statutory Broadcasting Authority only considers applications for licences and makes recommendations on such applications to the Chief Executive-in-Council.</p>	<p>The statutory Canadian Radio-television and Telecommunications Commission (CRTC), which reports to the Parliament of Canada through the responsible Minister, is responsible for granting licences.</p>	<p>The statutory Office of Communications (Ofcom), which reports to the UK Parliament through the responsible Minister, is responsible for granting licences.</p>	<p>The statutory Australian Communications and Media Authority (ACMA), which reports to the Parliament of Australia through the responsible Minister, is responsible for granting licences.</p>	<p>The statutory Federal Communications Commission (FCC), which reports directly to Congress, is responsible for granting licences.</p>
Licensing methods	<p>The Chief Executive-in-Council determines whether to grant a licence. It may take into account certain factors relating to the applicant's proposal and his or her management, financial and technical capabilities.</p>	<p>CRTC determines the granting of commercial and community licences after assessing applications against certain statutory criteria and holding public hearings on the applications.</p>	<p>A national analogue commercial radio licence is normally awarded to the highest bidder by a cash bid process, while a local analogue commercial radio licence or a community radio licence is awarded in an open competition to the applicant who best meets certain statutory criteria.</p>	<p>A commercial radio licence is awarded to the highest bidder under a price-based licence allocation exercise, while a long-term community radio licence is allocated to the applicant with more comparative merits.</p>	<p>A commercial radio licence is awarded by auction, while a non-commercial educational (NCE) radio licence or a Low Power FM (LPM) licence is granted to the applicant who best meets certain licensing criteria under a point system.</p>



## Appendix (cont'd)

## Regulation of radio broadcasting services in selected places and Hong Kong

	Hong Kong	Canada	United Kingdom	Australia	United States
Whether regulatory authorities must consider applications according to statutory licensing criteria	No, the Chief Executive-in-Council may consider certain factors before deciding on an application for a licence, but such consideration is not required by legislation.  The Telecommunications Ordinance only provides for the eligibility of an applicant for a licence.	Yes, CRTC must consider applications for commercial and community licences according to certain minimum criteria relating to Canadian ownership, financing, technical capacity and programming requirements. CRTC may also require an applicant to conduct a market study on the demand for the proposed service and its impact on the market.	Yes, Ofcom must follow certain statutory criteria to consider applications for local analogue commercial radio licences and community licences. Such criteria relate to an applicant's ability to maintain the proposed service and cater for the tastes and interests of target listeners, the broadening of choices of programmes and evidence of demand for the proposed service.	Yes, when allocating a long-term community licence on a merit basis, ACMA must have regard to certain statutory criteria, including whether the applicant would meet the existing and future needs of the community to be served and the nature and diversity of other broadcasting services available within that community.	Yes, under its point system for granting NCE radio licences, FCC must consider applicants according to certain criteria relating to their diversity of ownership, their proposed services' coverage of area and population and their links with the community to be served. FCC uses a similar point system to consider applications for LPFM licences.

## Appendix (cont'd)

## Regulation of radio broadcasting services in selected places and Hong Kong

	Hong Kong	Canada	United Kingdom	Australia	United States
Whether the general public may participate in the licensing process for radio broadcasting	No.	Yes, CRTC must hold a public hearing on an application for a licence. In addition, members of the public may petition the Governor in Council to urge CRTC to hold a hearing to reconsider its decision to issue a licence.	No.	Yes, when considering applications for a long-term community radio licence on a merit basis, ACMA may, at its discretion, hold a hearing to assess the comparative merits of the applications.	Yes, an applicant for NCE or commercial radio licences must maintain a file available for public inspection. The file must include copies of the application filed with FCC; citizen agreements, if any, made between the applicant and local listeners on programming, employment or other issues of community concern; and ownership reports including interests held by the applicant in other radio stations.

## Appendix (cont'd)

## Regulation of radio broadcasting services in selected places and Hong Kong

	Hong Kong	Canada	United Kingdom	Australia	United States
Whether the calculation of broadcasting licence fees is based on the recovery of regulatory costs	Yes.	Yes.	Yes.	Yes.	Yes.
Whether community radio has statutory status	No.	Yes.	Yes.	Yes.	Yes.
Whether measures are in place to promote diversity of community radio	No.	Yes, CRTC has encouraged the establishment of low-power developmental community radio stations, which can serve as a training ground for the future establishment of higher power community radio stations.	Yes, community radio must adhere to certain statutory ownership requirements. For instance, an application will be denied if it proposes to receive from any one source more than 50% of the income in a financial year to provide the proposed service.	Yes, ACMA may grant 12-month temporary community radio licences (instead of five-year long-term licences) to aspiring broadcasters wishing to build community support for long-term community radio services.	Yes, existing broadcasters, cable television system operators or daily newspaper publishers are not eligible for LPFM licences, which are designed to create opportunities for new voices to be heard on the radio.

## Appendix (cont'd)

## Regulation of radio broadcasting services in selected places and Hong Kong

	Hong Kong	Canada	United Kingdom	Australia	United States
Whether financial support is provided to community radio	No. In its Report on Review of Public Service Broadcasting in Hong Kong published in 2007, the Chief Executive-appointed Committee on Review of Public Service Broadcasting considered that given the high penetration of free radio services in Hong Kong and a small and relatively homogeneous population, there was no apparent case for funding community broadcasting with public money.	No.	Yes, the government has provided annually up to £500,000 (HK\$7.7m) for the Community Radio Fund, through which community radio licensees may apply for financial support. The Fund helps fund the core works involved in running community radio stations.	Yes, the federal government has established the Community Broadcasting Foundation to subsidize the community radio sector. The Foundation aims at promoting community radio as a well-resourced, independent, diverse, vibrant and accessible media sector.	No.

## Appendix (cont'd)

## Regulation of radio broadcasting services in selected places and Hong Kong

	Hong Kong	Canada	United Kingdom	Australia	United States
Technology adopted for digital radio broadcasting	Tests on digital transmission using the European Eureka-147 system (Eureka-147) are underway.	CRTC initially adopted Eureka-147 as a transmission standard for digital radio broadcasting (DRB). At present, it is considering the adoption of the In-Band-On-Channel (IBOC) transmission technology.	Ofcom has adopted Eureka-147 as a transmission standard for DRB.	AMCA has adopted Eureka-147 as a transmission standard for DRB.	FCC has adopted the IBOC technology as a transmission standard for DRB.
Latest development of digital radio broadcasting	The Government has maintained its view that the introduction of DRB services should be market-driven.	CRTC has been revising its DRB policy, owing to the slowing down of DRB rollout in recent years, and has no longer deemed DRB as a replacement technology for existing analogue radio services.	The UK has witnessed a significant growth in digital radio listeners in recent years for several reasons, including the high take-up of digital television, which offers digital radio, and the innovation and risk-taking by a number of smaller UK radio manufacturers.	The federal government has set 1 January 2009 as the official launch date for DRB in six State capitals. Nevertheless, DRB will only be supplementary to existing analogue radio services for a considerable period and may never be a complete replacement.	FCC has advocated interim and voluntary DRB for analogue service licensees to commence DRB, instead of imposing a mandatory conversion schedule for such licensees.

---

---

## References

### Canada

1. *Bell Canada Act 1987, c.19.* Available from: <http://laws.justice.gc.ca/en/showdoc/cs/B-3.6///en?page=1&noCookie> [Accessed June 2008].
2. *Broadcasting Act 1991, c.11.* Available from: <http://laws.justice.gc.ca/en/showdoc/cs/B-9.01///en?page=1&noCookie> [Accessed June 2008].
3. *Broadcasting Licence Fee Regulations, 1997.* Available from: <http://laws.justice.gc.ca/en/showdoc/cr/SOR-97-144//20080602/en?command> [Accessed June 2008].
4. Canadian Heritage. (2008) *Canada's World-Class Broadcasting System – The Government's Second response to Our Cultural Sovereignty: The Second Century of Canadian Broadcasting.* Available from: [http://cmte.parl.gc.ca/Content/HOC/committee/381/chpc/govresponse/rp1726418/CHPC\\_Rpt02\\_GvtRsp/GvtRsp\\_Part2Highlights-e.pdf](http://cmte.parl.gc.ca/Content/HOC/committee/381/chpc/govresponse/rp1726418/CHPC_Rpt02_GvtRsp/GvtRsp_Part2Highlights-e.pdf) [Accessed June 2008].
5. *Canadian Radio-television and Telecommunications Commission Act, C-22.* Available from: <http://laws.justice.gc.ca/en/showdoc/cs/C-22///en?page=1> [Accessed June 2008].
6. Canadian Radio-television and Telecommunications Commission. (1991) *Policy Proposals for Community and Campus Radio.* Public Notice CRTC 1991-118. Available from: <http://www.crtc.gc.ca/archive/ENG/Notices/1991/PB91-118.htm> [Accessed June 2008].
7. Canadian Radio-television and Telecommunications Commission. (1992) *Policies for Community and Campus Radio.* Public Notice CRTC 1992-38. Available from: <http://www.crtc.gc.ca/archive/ENG/Notices/1992/PB92-38.htm> [Accessed June 2008].
8. Canadian Radio-television and Telecommunications Commission. (1995) *A Policy to Govern the Introduction of Digital Radio.* Public Notice CRTC 1995-184. Available from: <http://www.crtc.gc.ca/archive/ENG/Notices/1995/PB95-184.htm> [Accessed June 2008].
9. Canadian Radio-television and Telecommunications Commission. (1999) *A proposed policy for community radio.* Public Notice CRTC 1999-75. Available from: <http://www.crtc.gc.ca/archive/ENG/Notices/1999/PB99-75.htm> [Accessed June 2008].

- 
10. Canadian Radio-television and Telecommunications Commission. (2006a) *Digital radio policy*. Broadcasting Public Notice CRTC 2006-160. Available from: <http://www.crtc.gc.ca/archive/ENG/Notices/2006/pb2006-160.htm> [Accessed June 2008].
  11. Canadian Radio-television and Telecommunications Commission. (2006b) *How to Apply for a Broadcasting Licence*. Available from: [http://www.crtc.gc.ca/eng/INFO\\_SHT/b313.htm](http://www.crtc.gc.ca/eng/INFO_SHT/b313.htm) [Accessed June 2008].
  12. Canadian Radio-television and Telecommunications Commission. (2007) *Broadcasting Policy Monitoring Report 2007*. Available from: <http://www.crtc.gc.ca/eng/publications/reports/PolicyMonitoring/2007/bpmr2007.pdf> [Accessed June 2008].
  13. Canadian Radio-television and Telecommunications Commission. (2008) *Call for applications: Radio – Bracebridge and Gravenhurst, Ontario*. Broadcasting Public Notice CRTC 2008-42. Available from: <http://www.crtc.gc.ca/archive/ENG/Notices/2008/pb2008-42.htm> [Accessed June 2008].
  14. *Community-media.com*. (2008) Available from: <http://www.community-media.com/startfm.html> [Accessed June 2008].
  15. Community Radio Network. (2004) *Legislating for Community Radio- Policy Frameworks from Australia, USA, Canada, Ireland and South Africa*. Available from: [http://www.communityradionetwork.org/toplinks/archives/glob\\_exp](http://www.communityradionetwork.org/toplinks/archives/glob_exp) [Accessed April 2008].
  16. *CRTC Rules of Procedure*. Available from: [http://laws.justice.gc.ca/en/showdoc/cr/C.R.C.-c.375/bo-ga:s\\_3::bo-ga:s\\_9?page=1](http://laws.justice.gc.ca/en/showdoc/cr/C.R.C.-c.375/bo-ga:s_3::bo-ga:s_9?page=1) [Accessed June 2008].
  17. *CRTC Telecommunications Rules of Procedure*. Available from: <http://laws.justice.gc.ca/en/showdoc/cr/SOR-79-554///en?page=1&noCookie> [Accessed June 2008].
  18. *Direction to the CRTC (Ineligibility of Non-Canadians)*. Available from: <http://laws.justice.gc.ca/en/showdoc/cr/SOR-97-192///en?page=1> [Accessed June 2008].
  19. *Direction to the CRTC (Ineligibility to Hold Broadcasting Licences)*. Available from: <http://laws.justice.gc.ca/en/showdoc/cr/SOR-85-627///en?page=1> [Accessed June 2008].
  20. Government of Canada. (2008) *Commercial AM or FM Radio Broadcasting*. Available from: [http://www.canadabusiness.ca/servlet/ContentServer?cid=1081944212438&page name=CBSC\\_FE%2Fdisplay&lang=en&c=Regs](http://www.canadabusiness.ca/servlet/ContentServer?cid=1081944212438&page name=CBSC_FE%2Fdisplay&lang=en&c=Regs) [Accessed June 2008].
-

- 
- 
21. Industry Canada. (2000a) *Frequently Asked Questions on Low Power FM Broadcasting*. Available from: [http://www.ic.gc.ca/epic/site/smt-gst.nsf/vwapj/ric40.PDF/\\$FILE/ric40.PDF](http://www.ic.gc.ca/epic/site/smt-gst.nsf/vwapj/ric40.PDF/$FILE/ric40.PDF) [Accessed June 2008].
  22. Industry Canada. (2000b) *Part 5: Application Procedures and Rules for Digital Radio Broadcasting (DRB) Undertakings*. Available from: [http://www.ic.gc.ca/epic/site/smt-gst.nsf/vwapj/bpr5.pdf/\\$FILE/bpr5.pdf](http://www.ic.gc.ca/epic/site/smt-gst.nsf/vwapj/bpr5.pdf/$FILE/bpr5.pdf) [Accessed June 2008].
  23. Industry Canada. (2002) *SPFC – Spectrum Policy Framework for Canada*. Available from: <http://www.ic.gc.ca/epic/site/smt-gst.nsf/en/sf08776e.html> [Accessed June 2008].
  24. Industry Canada. (2004) *Radiocommunication Act: Allotment Plan for Digital Radio Broadcasting (DRB)*. Notice No. SMBR-004-98 Available from: <http://www.ic.gc.ca/epic/site/smt-gst.nsf/en/sf01664e.html> [Accessed May 2008].
  25. Industry Canada. (2007) *Spectrum Policy Framework for Canada*. Available from: [http://www.ic.gc.ca/epic/site/smt-gst.nsf/vwapj/spf2007e.pdf/\\$FILE/spf2007e.pdf](http://www.ic.gc.ca/epic/site/smt-gst.nsf/vwapj/spf2007e.pdf/$FILE/spf2007e.pdf) [Accessed June 2008].
  26. Industry Canada. (2008) Available from: [https://spectrumdirect.ic.gc.ca/pls/engdoc\\_anon/sd\\_pages.main](https://spectrumdirect.ic.gc.ca/pls/engdoc_anon/sd_pages.main) [Accessed June 2008].
  27. National Campus and Community Radio Association. (2000) *Community radio policy*. Public Notice CRTC 2000-13. Available from: <http://www.ncra.ca/CRTC/PublicNotice/2000-13.html> [Accessed June 2008].
  28. *Radiocommunication Act (R.S., 1985, c. R-2)*. Available from: <http://laws.justice.gc.ca/en/ShowTdm/cs/R-2///en> [Accessed June 2008].
  29. *Radio Regulations, 1986*. Available from: <http://laws.justice.gc.ca/en/showdoc/cr/SOR-86-982///en?page=1> [Accessed June 2008].
  30. Statistics Canada. (2007) *Radio Broadcasting Industry*. Available from: <http://www.statcan.ca/english/freepub/56-208-XIE/2007000/part1.htm> [Accessed June 2008].
  31. *Telecommunications Act (1993, c.38)*. Available from: <http://laws.justice.gc.ca/en/T-3.4/?noCookie> [Accessed June 2008].
  32. Treasury Board of Canada Secretariat. (2006) *CRTC Reorganization*. Available from: [http://www.tbs-sct.gc.ca/rpp/0607/CRTC-CRTC/crtc-crtc03\\_e.asp](http://www.tbs-sct.gc.ca/rpp/0607/CRTC-CRTC/crtc-crtc03_e.asp) [Accessed June 2008].
- 
-



- 
- 
33. Waters, P. et al. (2007) *Spectrum allocation processes: A review of global experience*. Available from: [http://www.ic.gc.ca/epic/site/smt-gst.nsf/vwapj/dgtp-002-07-bell-Appendix-3.pdf](http://www.ic.gc.ca/epic/site/smt-gst.nsf/vwapj/dgtp-002-07-bell-Appendix-3.pdf/$FILE/dgtp-002-07-bell-Appendix-3.pdf) [Accessed June 2008].

### United Kingdom

34. *Broadcasting Act 1990, Chapter 42*. Available from: [http://www.opsi.gov.uk/acts/acts1990/ukpga\\_19900042\\_en\\_1](http://www.opsi.gov.uk/acts/acts1990/ukpga_19900042_en_1) [Accessed June 2008].
35. *Broadcasting Act 1996, Chapter 55*. Available from: [http://www.opsi.gov.uk/Acts/acts1996/ukpga\\_19960055\\_en\\_1](http://www.opsi.gov.uk/Acts/acts1996/ukpga_19960055_en_1) [Accessed June 2008].
36. Cave, M. (2002) *Review of Radio Spectrum Management: An independent review for Department of Trade and Industry and HM Treasury*. Available from: <http://www.cochrane.org.uk/inside/uk-radio-spectrum-managment.pdf> [Accessed June 2008].
37. *Communications Act 2003, Chapter 21*. Available from: [http://www.opsi.gov.uk/acts/acts2003/ukpga\\_20030021\\_en\\_1](http://www.opsi.gov.uk/acts/acts2003/ukpga_20030021_en_1) [Accessed June 2008].
38. Community Media Association. (2008) *About Community Radio*. Available from: <http://www.commedia.org.uk/about-community-media/community-radio/about-community-radio/> [Accessed June 2008].
39. *Community Media Association*. (2008) Available from: <http://www.commedia.org.uk/about-cma/> [Accessed June 2008].
40. *Community Radio Order 2004*. Available from: <http://www.opsi.gov.uk/si/si2004/20041944.htm> [Accessed June 2008].
41. Office of Communications. (2004a) *Radio – Preparing for the Future, Phase 1 developing a new framework*. Available from: [http://www.ofcom.org.uk/consult/condocs/radio\\_review/radio\\_review2/radio\\_review.pdf](http://www.ofcom.org.uk/consult/condocs/radio_review/radio_review2/radio_review.pdf) [Accessed June 2008].
42. Office of Communications. (2004b) *Spectrum Framework Review: A consultation on Ofcom's views as to how radio spectrum should be managed*. Available from: <http://www.ofcom.org.uk/consult/condocs/sfr/sfr2/sfr.pdf> [Accessed June 2008].

- 
- 
43. Office of Communications. (2005a) *Application for a Digital Sound Programme Service Licence*. Available from: [http://www.ofcom.org.uk/radio/ifi/rbl/dcr/dsp/dsps\\_app.doc](http://www.ofcom.org.uk/radio/ifi/rbl/dcr/dsp/dsps_app.doc) [Accessed June 2008].
  44. Office of Communications. (2005b) *Local Digital Sound Programme (DSP) Licences & Digital Additional Sound Services (DAS) Licences: Notes of Guidance for Applicants*. Available from: [http://www.ofcom.org.uk/radio/ifi/rbl/dcr/dsp/dsps\\_das.rtf](http://www.ofcom.org.uk/radio/ifi/rbl/dcr/dsp/dsps_das.rtf) [Accessed June 2008].
  45. Office of Communications. (2005c) *Radio – Preparing for the Future, Phase 2: Implementing the Framework*. Available from: [http://www.ofcom.org.uk/consult/condocs/radio\\_reviewp2/p2.pdf](http://www.ofcom.org.uk/consult/condocs/radio_reviewp2/p2.pdf) [Accessed June 2008].
  46. Office of Communications. (2005d) *Spectrum Framework Review: Implementation Plan*. Available from: <http://www.ofcom.org.uk/consult/condocs/sfrip/sfip/sfr-plan.pdf> [Accessed June 2008].
  47. Office of Communications. (2005e) *Statement of Charging Principles*. Available from: [http://www.ofcom.org.uk/consult/condocs/socp/statement/charging\\_principles.pdf](http://www.ofcom.org.uk/consult/condocs/socp/statement/charging_principles.pdf) [Accessed June 2008].
  48. Office of Communications. (2006) *Notes of Guidance for Community Radio Licence Applicants and Licensees*. Available from: [http://www.ofcom.org.uk/radio/ifi/rbl/commun\\_radio/tlproc/nogs\\_r23.pdf](http://www.ofcom.org.uk/radio/ifi/rbl/commun_radio/tlproc/nogs_r23.pdf) [Accessed June 2008].
  49. Office of Communications. (2007a) *Annual Report 2006/7*. Available from: [http://www.ofcom.org.uk/about/accoun/reports\\_plans/annrep0607/annualrpt0607.pdf](http://www.ofcom.org.uk/about/accoun/reports_plans/annrep0607/annualrpt0607.pdf) [Accessed June 2008].
  50. Office of Communications. (2007b) *Illegal Broadcasting: Understanding the issues*. Available from: [http://www.ofcom.org.uk/research/radio/reports/illegal\\_broadcasting/illegal\\_broadcasting.pdf](http://www.ofcom.org.uk/research/radio/reports/illegal_broadcasting/illegal_broadcasting.pdf) [Accessed June 2008].
  51. Office of Communications. (2007c) *Ofcom's Tariff Tables 2007/08*. Available from: <http://www.ofcom.org.uk/about/accoun/tarifftable0708/tariffs0708.pdf> [Accessed June 2008].
  52. Office of Communications. (2007d) *Restricted Service Licences: Notes for Applicants*. Available from: [http://www.ofcom.org.uk/radio/ifi/rbl/rsls/rslapps/rsl\\_notes.pdf](http://www.ofcom.org.uk/radio/ifi/rbl/rsls/rslapps/rsl_notes.pdf) [Accessed June 2008].
- 
-

- 
- 
53. Office of Communications. (2007e) *The Future of Radio: The future of FM and AM services and the alignment of analogue and digital regulation*. Available from: <http://www.ofcom.org.uk/consult/condocs/futureradio/future.pdf> [Accessed June 2008].
  54. Office of Communications. (2007f) *The Future of Radio: The next phase*. Available from: <http://www.ofcom.org.uk/consult/condocs/futureradio07/nextphase.pdf> [Accessed June 2008].
  55. Office of Communications. (2008a) *Community Radio Fund Panel*. Available from: [http://www.ofcom.org.uk/about/csg/com\\_radio/](http://www.ofcom.org.uk/about/csg/com_radio/) [Accessed June 2008].
  56. Office of Communications. (2008b) *Managing the radio spectrum: The role of Ofcom*. Available from: [http://www.ofcom.org.uk/radiocomms/ifi/licensing\\_policy\\_manual\\_2/radio\\_spectrum](http://www.ofcom.org.uk/radiocomms/ifi/licensing_policy_manual_2/radio_spectrum) [Accessed June 2008].
  57. Office of Communications. (2008c) *Progress on key spectrum initiatives: A review and update of the SFR and SFR:IP*. Available from: <http://www.ofcom.org.uk/radiocomms/sfr/sfrprogress/sfrprogress.pdf> [Accessed June 2008].
  58. Office of Communications. (2008d) *Radio Licensing: FAQs*. Available from: <http://www.ofcom.org.uk/media/mofaq/bdc/radio/> [Accessed June 2008].
  59. *Wireless Telegraphy Act 2006, Chapter 36*. Available from: [http://www.opsi.gov.uk/acts/acts2006/ukpga\\_20060036\\_en\\_1](http://www.opsi.gov.uk/acts/acts2006/ukpga_20060036_en_1) [Accessed June 2008].

### Australia

60. Australian Broadcasting Authority. (2002) *Community Broadcasting Codes of Practice 2002*. Available from: [http://www.acma.gov.au/webwr/aba/contentreg/codes/radio/documents/cbaa\\_code.pdf](http://www.acma.gov.au/webwr/aba/contentreg/codes/radio/documents/cbaa_code.pdf) [Accessed June 2008].
61. Australian Broadcasting Authority. (2005) *Digital Radio Task Group Report into Spectrum Availability*. Available from: [http://www.acma.gov.au/webwr/\\_assets/main/lib100535/digital\\_radio\\_task\\_group\\_report-01%20july.pdf](http://www.acma.gov.au/webwr/_assets/main/lib100535/digital_radio_task_group_report-01%20july.pdf) [Accessed June 2008].
62. *Australian Communications and Media Authority Act 2005*. Available from: <http://scaleplus.law.gov.au/html/comact/12/6958/pdf/0442005.pdf> [Accessed June 2008].

- 
- 
63. Australian Communications and Media Authority. (2007a) *Australian Communications and Media Authority: Annual Report 2006-07*. Available from: [http://www.acma.gov.au/WEB/STANDARD/pc=PC\\_100770](http://www.acma.gov.au/WEB/STANDARD/pc=PC_100770) [Accessed June 2008].
  64. Australian Communications and Media Authority. (2007b) *Broadcasting*. Available from: [http://www.acma.gov.au/WEB/STANDARD/pc=PC\\_1262](http://www.acma.gov.au/WEB/STANDARD/pc=PC_1262) [Accessed June 2008].
  65. Australian Communications and Media Authority. (2007c) *Commercial free-to-air*. Available from: [http://www.acma.gov.au/WEB/STANDARD/pc=PC\\_90185](http://www.acma.gov.au/WEB/STANDARD/pc=PC_90185) [Accessed June 2008].
  66. Australian Communications and Media Authority. (2007d) *Digital radio*. Available from: [http://www.acma.gov.au/WEB/STANDARD/pc=PC\\_9191](http://www.acma.gov.au/WEB/STANDARD/pc=PC_9191) [Accessed June 2008].
  67. Australian Communications and Media Authority. (2008a) *About ACMA's role*. Available from: [http://www.acma.gov.au/WEB/STANDARD/pc=ACMA\\_ROLE\\_OVIEW](http://www.acma.gov.au/WEB/STANDARD/pc=ACMA_ROLE_OVIEW) [Accessed June 2008].
  68. Australian Communications and Media Authority. (2008b) *Broadcasting licence fees 2007-08*. Available from: [http://www.acma.gov.au/WEB/STANDARD/pc=PC\\_100715](http://www.acma.gov.au/WEB/STANDARD/pc=PC_100715) [Accessed June 2008].
  69. Australian Communications and Media Authority. (2008c) *Commercial*. Available from: [http://www.acma.gov.au/WEB/STANDARD/pc=PC\\_90039](http://www.acma.gov.au/WEB/STANDARD/pc=PC_90039) [Accessed June 2008].
  70. Australian Communications and Media Authority. (2008d) *Licence allocations, renewals and transfers*. Available from: [http://www.acma.gov.au/WEB/STANDARD/pc=PC\\_311058](http://www.acma.gov.au/WEB/STANDARD/pc=PC_311058) [Accessed June 2008].
  71. Australian Communications and Media Authority. (2008e) *Radiofrequency spectrum*. Available from: [http://www.acma.gov.au/WEB/LANDING/pc=SPECTRUM\\_MAIN](http://www.acma.gov.au/WEB/LANDING/pc=SPECTRUM_MAIN) [Accessed June 2008].
  72. Australian Communications and Media Authority. (2008f) *Spectrum Management Principles: Consultation on ACMA's draft spectrum management principles*. Available from: [http://www.acma.gov.au/webwr/\\_assets/main/lib310643/smp.pdf](http://www.acma.gov.au/webwr/_assets/main/lib310643/smp.pdf) [Accessed June 2008].
- 
-

- 
- 
73. *Bills Digest no. 142, 2006-07: Broadcasting Legislation Amendment (Digital Radio) Bill 2007.* Available from: <http://www.aph.gov.au/Library/Pubs/BD/2006-07/07bd142.htm> [Accessed June 2008].
  74. *Broadcasting Services Act 1992.* Available from: <http://www.comlaw.gov.au/ComLaw/Legislation/ActCompilation1.nsf/frame/odgmentattachments/5BDAB44A6814AF7FCA25732500089425> [Accessed June 2008].
  75. *Commonwealth Consolidated Acts.* Available from: [http://www.austlii.edu.au/au/legis/cth/consol\\_act/bsa1992214/sch1.html](http://www.austlii.edu.au/au/legis/cth/consol_act/bsa1992214/sch1.html) [Accessed June 2008].
  76. Community Broadcasting Association of Australia. (2006) *Community Radio National Listener Survey: Summary Report of Findings.* Available from: [http://www.cbonline.org.au/media/listener\\_survey/McNair\\_Report.pdf](http://www.cbonline.org.au/media/listener_survey/McNair_Report.pdf) [Accessed June 2008].
  77. Community Broadcasting Association of Australia. (2007) *Community Broadcasting Database: Survey of the Community Radio Sector: 2005-06 Financial Period.* Available from: <http://www.cbonline.org.au/media/CBD07.pdf> [Accessed June 2008].
  78. *Community Broadcasting Foundation.* (2008) Available from: [http://www.cbf.com.au/Content/templates/about\\_cbf.asp?articleid=6&zoneid=5](http://www.cbf.com.au/Content/templates/about_cbf.asp?articleid=6&zoneid=5) [Accessed June 2008].
  79. Department of Broadband, Communications and the Digital Economy. (2008a) *Community radio.* Available from: [http://www.dbcde.gov.au/media\\_broadcasting/radio/community\\_radio](http://www.dbcde.gov.au/media_broadcasting/radio/community_radio) [Accessed June 2008].
  80. Department of Broadband, Communications and the Digital Economy. (2008b) *Digital Radio.* Available from: [http://www.dbcde.gov.au/media\\_broadcasting/radio/digital\\_radio](http://www.dbcde.gov.au/media_broadcasting/radio/digital_radio) [Accessed June 2008].
  81. Department of Broadband, Communications and the Digital Economy. (2008c) *Rollout of digital radio in Australia.* Available from: [http://www.dbcde.gov.au/media\\_broadcasting/radio/digital\\_radio/rollout\\_of\\_digital\\_radio\\_in\\_australia](http://www.dbcde.gov.au/media_broadcasting/radio/digital_radio/rollout_of_digital_radio_in_australia) [Accessed June 2008].
  82. Department of Communications, Information Technology and the Arts. (2004) *Introduction of Digital Radio: Issues Paper.* Available from: [http://www.dbcde.gov.au/\\_\\_data/assets/word\\_doc/0019/23365/Digital\\_Radio\\_Issues\\_Paper\\_16Dec04.doc](http://www.dbcde.gov.au/__data/assets/word_doc/0019/23365/Digital_Radio_Issues_Paper_16Dec04.doc) [Accessed June 2008].
- 
-

- 
- 
83. *Radiocommunications Act 1992*. Available from: <http://scaleplus.law.gov.au/html/pasteact/0/300/0/PA000480.htm> [Accessed June 2008].

#### United States

84. Evans, D.L. (2004) *Spectrum Policy for the 21<sup>st</sup> Century – the President's Spectrum Policy Initiative: Report 1*. U.S. Department of Commerce. Available from: [http://www.ntia.doc.gov/reports/specpolini/presspecpolini\\_report1\\_06242004.htm](http://www.ntia.doc.gov/reports/specpolini/presspecpolini_report1_06242004.htm) [Accessed June 2008].
85. Federal Communications Commission. (2000a) *Creation of Low Power Radio Service*. Available from: [http://www.fcc.gov/Bureaus/Mass\\_Media/Orders/2000/fcc00019.pdf](http://www.fcc.gov/Bureaus/Mass_Media/Orders/2000/fcc00019.pdf) [Accessed June 2008].
86. Federal Communications Commission. (2000b) *Reexamination of the Comparative Standards for Noncommercial Educational Applicants*. Available from: [http://www.fcc.gov/Bureaus/Mass\\_Media/Orders/2000/fcc00120.pdf](http://www.fcc.gov/Bureaus/Mass_Media/Orders/2000/fcc00120.pdf) [Accessed June 2008].
87. Federal Communications Commission. (2001) *Reexamination of the Comparative Standards for Noncommercial Educational Applicants*. Available from: [http://www.fcc.gov/Bureaus/Mass\\_Media/Orders/2001/fc01064.pdf](http://www.fcc.gov/Bureaus/Mass_Media/Orders/2001/fc01064.pdf) [Accessed June 2008].
88. Federal Communications Commission. (2002) *Digital Audio Broadcasting Systems And Their Impact on the Terrestrial Radio Broadcast Service*. Available from: [http://www.nautel.com/Resources/Docs/Whitepapers/6\\_FCC\\_Report\\_and\\_Order.pdf](http://www.nautel.com/Resources/Docs/Whitepapers/6_FCC_Report_and_Order.pdf) [Accessed June 2008].
89. Federal Communications Commission. (2006) *About Auctions*. Available from: [http://wireless.fcc.gov/auctions/default.htm?job=about\\_auctions&page=4](http://wireless.fcc.gov/auctions/default.htm?job=about_auctions&page=4) [Accessed June 2008].
90. Federal Communications Commission. (2007a) *Digital Audio Broadcasting Systems And Their Impact on the Terrestrial Radio Broadcast Service*. Available from: <http://www.radioworld.com/pages/s.0052/images/FCC-07-33A1.pdf> [Accessed June 2008].
91. Federal Communications Commission. (2007b) *FCC IT Strategic Plan FY 2008-2012*. Available from: <http://www.fcc.gov/omd/strategicplan/InfoTechnologyPlansandReports/itsp2008-2012.pdf> [Accessed June 2008].

- 
- 
92. Federal Communications Commission. (2007c) *Performance and Accountability Report: Fiscal Year 2007*. Available from: <http://www.fcc.gov/Reports/ar2007.pdf> [Accessed June 2008].
  93. Federal Communications Commission. (2008a) *Core Principles of Effective Spectrum Management*. Available from: <http://www.fcc.gov/connectglobe/sec7.html> [Accessed June 2008].
  94. Federal Communications Commission. (2008b) *Digital Audio Broadcasting (DAB)*. Available from: <http://www.fcc.gov/mb/policy/dab.html> [Accessed June 2008].
  95. Federal Communications Commission. (2008c) *How to Apply for a Broadcast Station*. Available from: <http://www.fcc.gov/mb/audio/howtoapply.html> [Accessed June 2008].
  96. Federal Communications Commission. (2008d) *Low Power Broadcast Radio Stations*. Available from: <http://www.fcc.gov/mb/audio/lowpwr.html> [Accessed June 2008].
  97. Federal Communications Commission. (2008e) *Low Power FM Radio Service: Allegations and Facts*. Available from: [http://www.fcc.gov/Bureaus/Mass\\_Media/Factsheets/lpfmfact032900.html](http://www.fcc.gov/Bureaus/Mass_Media/Factsheets/lpfmfact032900.html) [Accessed June 2008].
  98. Federal Communications Commission. (2008f) *Low Power FM Radio*. Available from: <http://www.fcc.gov/mb/policy/lpfm/> [Accessed June 2008].
  99. Federal Communications Commission. (2008g) *Low Power FM Radio: An Applicant's Guide*. Available from: <http://www.fcc.gov/mb/audio/lpfm/lpfmguide.pdf> [Accessed June 2008].
  100. Federal Communications Commission. (2008h) *News: Broadcast Station Totals as of December 31, 2007*. Available from: [http://fjallfoss.fcc.gov/edocs\\_public/attachmatch/DOC-280836A1.pdf](http://fjallfoss.fcc.gov/edocs_public/attachmatch/DOC-280836A1.pdf) [Accessed June 2008].
  101. Federal Communications Commission. (2008i) *Public Inspection File*. Available from: <http://www.fcc.gov/eb/broadcast/pif.html> [Accessed June 2008].
  102. Federal Communications Commission. (2008j) *Radio and Television Broadcast Rules: 47 CFR Part 73*. Available from: <http://www.fcc.gov/mb/audio/bickel/amfmrule.html> [Accessed June 2008].
  103. Federal Communications Commission. *FCC's Decision on NCE Comparative Standards*. Available from: <http://www.nprstations.org/nationalaffairs/regulatory/nceorder.cfm> [Accessed June 2008].
- 
-

- 
- 
104. Federal Communications Commission. *IBOC Digital Radio Broadcasting for AM and FM Radio Broadcast Stations*. Available from: <http://www.fcc.gov/mb/audio/digital/index.html> [Accessed June 2008].
105. National Telecommunications and Information Administration. (2003) *Executive Memorandum on Spectrum Policy Reform*. Available from: <http://www.ntia.doc.gov/osmhome/spectrumreform/execmemo.htm> [Accessed June 2008].
106. U.S. Code collection. Available from: [http://db.law.cornell.edu/uscode/47/usc\\_sec\\_47\\_00000301----000-.html](http://db.law.cornell.edu/uscode/47/usc_sec_47_00000301----000-.html) [Accessed June 2008].
107. US Communications Act of 1934. Available from: [http://www.dinf.ne.jp/doc/english/Us\\_Eu/ada\\_e/telcom\\_act/47/ch5.htm](http://www.dinf.ne.jp/doc/english/Us_Eu/ada_e/telcom_act/47/ch5.htm) [Accessed June 2008].

#### Hong Kong

108. Broadcasting Authority. (2008) Available from: <http://www.hkba.hk/en/index.html> [Accessed June 2008].
109. Broadcasting Authority. (2008) *Broadcasting in Hong Kong*. Available from: <http://www.hkba.hk/en/policy/overview.html> [Accessed June 2008].
110. Commerce and Economic Development Bureau. (2007) *Press Release: Government announces spectrum policy framework*. Available from: <http://www.cedb.gov.hk/ctb/eng/press/pr24042007.htm> [Accessed June 2008].
111. Commerce, Industry and Technology Bureau. (2005) *Digital Audio Broadcasting*. Paper submitted to the Panel on Information Technology and Broadcasting of the Legislative Council for information on 9 January 2006. LC Paper No. CB(1)596/05-06(03).
112. Commerce, Industry and Technology Bureau. (2006a) *Final Report: Spectrum Policy Review*. Available from: [http://www.cedb.gov.hk/ctb/eng/paper/pdf/SPR-Final\\_report.pdf](http://www.cedb.gov.hk/ctb/eng/paper/pdf/SPR-Final_report.pdf) [Accessed June 2008].
113. Commerce, Industry and Technology Bureau. (2006b) *Legislative Council Brief: Telecommunications Ordinance (Chapter 106) – Application for a Sound Broadcasting Licence to Operate Community Radio Service*. Available from: <http://www.legco.gov.hk/yr06-07/english/panels/itb/papers/itb-ctbcr922606pt4-e.pdf> [Accessed June 2008].



- 
- 
114. Commerce, Industry and Technology Bureau. (2007) *Radio Spectrum Policy Framework*. Available from:  
<http://www.cedb.gov.hk/ctb/eng/legco/pdf/spectrum.pdf> [Accessed June 2008].
  115. Committee on Review of Public Service Broadcasting. (2007) *Report on Review of Public Service Broadcasting in Hong Kong*. LC Paper No. CB(1)1258/06-07. Available from:  
<http://www.legco.gov.hk/yr06-07/english/panels/itb/papers/itbcb1-1258-e.pdf> [Accessed June 2008].
  116. Consumer Council. (2001) *Consumer Council Submission Telecommunications Authority Consultation Paper Creation of Class Licence for Terminal Equipment (April 06, 2001)*. Available from:  
[http://www.consumer.org.hk/website/ws\\_en/competition\\_issues/policy\\_position/2001040601.txt](http://www.consumer.org.hk/website/ws_en/competition_issues/policy_position/2001040601.txt) [Accessed June 2008].
  117. Legislative Council Secretariat. (2005) *Information Note on Digital Audio Broadcasting*. LC Paper No. IN06/05-06.
  118. Legislative Council Secretariat. (2006) *Research Report on Public Service Broadcasting in Selected Places*. LC Paper No. RP01/06-07.
  119. Legislative Council Secretariat. (2007) *Information Note on Spectrum Management in Hong Kong*. LC Paper No. IN02/06-07.
  120. Legislative Council Secretariat. (2008) *Background brief on issues relating to the provision of sound broadcasting services*. Paper submitted to the Panel on Information Technology and Broadcasting of the Legislative Council on 19 February 2008. LC Paper No. CB(1)805/07-08(02).