

Partial Revision of the 2008 Radio Regulations, as incorporated in the International Telecommunication Union Final Acts of the World Radiocommunication Conference of 2012 (WRC-12)

Background

- 4.1 On 11 September 2012, the *Partial Revision of the 2008 Radio Regulations, as incorporated in the International Telecommunication Union Final Acts of the World Radiocommunication Conference (WRC-12)* done at Geneva on 17 February 2012 (the 'Radio Regulations revision of 2012') was tabled in Parliament.
- 4.2 The Radio Regulations are part of the international regulatory framework of the International Telecommunications Union (the ITU).¹
- 4.3 The ITU is a United Nations specialised agency with 192 members. The ITU maintains and extends international cooperation between member states for the improvement and rational use of telecommunications of all kinds.²
- 4.4 The ITU provides an international framework for the operations of the communications industries and an international forum for Australia to

1 National Interest Analysis [2012] ATNIA 21 with attachment on consultation *Partial Revision of the 2008 Radio Regulations as incorporated in the International Telecommunication Union Final Acts of the World Radiocommunication Conference (WRC-12), (Geneva, 17 February 2012)*, [2012] ATNIF 15, (Hereafter referred to as 'NIA'), para 2.

2 Joint Standing Committee on Treaties, *Report 119*, p 3.

- pursue Australian and regional perspectives on radio communications, broadcasting and telecommunications.³
- 4.5 Within the ITU, Australia promotes the development of international standards that support the development of efficient, inter-operable telecommunications networks through the standardisation of communications systems and the harmonisation of regulatory arrangements.⁴
- 4.6 The work of the ITU is technically complicated and not widely understood. However, its work does materially improve telecommunication services for the general public.⁵
- 4.7 The ITU funds its activities through contributions from member states. Unlike other United Nations agencies, member states decide their own level of contribution.⁶

Radiofrequency regulation

- 4.8 Radiofrequencies constitute part of the spectrum of electromagnetic energy, the best known part of which is the spectrum of visible light. Radiofrequencies are considered to be those electromagnetic frequencies with the longest wavelength and the least energy.⁷ The radiofrequency spectrum is the span of electromagnetic frequencies used in communications systems to convey information.⁸
- 4.9 The radiofrequency spectrum is considered by the ITU to be a limited natural resource because the transmission of information through radiocommunications requires that the particular frequency used to transmit the information be free of other transmissions that may interfere with the transmission.⁹

3 Joint Standing Committee on Treaties, *Report 119*, p 3.

4 NIA, para 7.

5 International Telecommunications Union (ITU), *All About the Technology*, <<http://www.itu.int/osg/spu/ni/3G/technology/index.html#Cellular Standards for the Third Generation>>, viewed on 1 November 2012.

6 Joint Standing Committee on Treaties, *Report 119*, p 4.

7 The Conversation, *What is the electromagnetic spectrum?* <<http://theconversation.edu.au/explainer-what-is-the-electromagnetic-spectrum-8046>>, viewed on 5 November 2012.

8 Australian Communications and Media Authority, *Radiofrequency spectrum planning*, <http://www.acma.gov.au/WEB/STANDARD/pc=PC_2616>, viewed on 5 November 2012.

9 Australian Communications and Media Authority, *Radiofrequency spectrum planning*, <http://www.acma.gov.au/WEB/STANDARD/pc=PC_2616>, viewed on 5 November 2012.

- 4.10 This limited resource needs to be shared amongst a growing number of services such as fixed, mobile, broadcasting, amateur, space research, emergency telecommunications, meteorology, global positioning systems, environmental monitoring, and communication services.¹⁰
- 4.11 The Radio Regulations manage access to the radiofrequency spectrum through international agreement on access to the radiofrequency spectrum and satellite orbits.¹¹
- 4.12 The ITU organises World Radiocommunication Conferences every four years which are empowered to amend the Radio Regulations. The Conference that is the subject of this Chapter resulted in a partial amendment of the Radio Regulations.¹²

The Radio Regulations revision of 2012

- 4.13 The Radio Regulations are binding on the member states of the ITU.¹³
- 4.14 The Radio Regulations revision of 2012 will come into effect on 1 January 2013 for all member states who have notified the ITU of their consent by that date. For those states that have not notified the ITU of their consent, the Radio Regulations revision of 2012 will be deemed to apply from 1 January 2013 until such time as a document of consent is received by the ITU from that member state.¹⁴
- 4.15 In effect, then, while a member state may notify the ITU of reservations and declarations in relation to the amendments, there is no way for a member state to avoid being bound by the Radio Regulations revision of 2012 once those revisions were agreed in February 2012.¹⁵
- 4.16 The amendments to the Radio Regulations agreed to in February 2012 include:

10 ITU, *Welcome to ITU Radiocommunications* < <http://www.itu.int/ITU-R/index.asp?category=information&mlink=itur-welcome&lang=en>>, viewed on 1 November 2012.

11 ITU, *Welcome to ITU Radiocommunications* < <http://www.itu.int/ITU-R/index.asp?category=information&mlink=itur-welcome&lang=en>>, viewed on 1 November 2012.

12 Mr Andrew Maurer, Assistant Secretary, Spectrum, Treaties and Internet Governance Branch, Department of Broadband, Communications and the Digital Economy, *Committee Hansard*, 29 October 2012, p. 1.

13 NIA, para 2.

14 NIA, para 3.

15 NIA, para 6; and ITU, *2008 Radio Regulations, Article 59*.

- the revision of frequencies and channelling arrangements for maritime mobile services, allowing new digital maritime communications technologies to be used;¹⁶
 - the allocation of spectrum to support the safe operation of unmanned aircraft systems;¹⁷
 - new spectrum allocations to radiolocation services, including: oceanographic radar for measurement of coastal sea surface conditions to support environmental, oceanographic, meteorological, climatological, maritime and disaster mitigation operations; and new defence radar systems that require increased bandwidth for improved resolution and range accuracy;¹⁸
 - the enhancement of Earth observation systems that provide critical data relating to weather and climate forecasts, disaster prediction, and natural resources through a new spectrum allocation for passive lightning detection, and an extension of the spectrum allocated to existing non-geostationary meteorological satellite to allow increased data transmission in the next generation of satellites;¹⁹
 - new spectrum allocations to space research to support Earth-to-space communications for lunar exploration missions;²⁰
 - an allocation of spectrum globally for radio determination satellites (that is, global positioning system satellites) to accommodate the new Galileo satellite navigation system and improve existing global positioning systems;²¹
 - a new allocation of spectrum to amateur users to allow for emergency communications and to provide an opportunity for research and development of new communication modes;²² and
 - an improvement to the international coordination of satellite networks through:
 - ⇒ improving the international notification process for new satellite deployments, and to provide additional security of tenure for notified satellite networks;
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16 NIA, para 15.

17 NIA, para 17.

18 NIA, para 19.

19 NIA, para 20.

20 NIA, para 21.

21 NIA, para 22. "Galileo is Europe's own global navigation satellite system, providing a highly accurate, guaranteed global positioning service under civilian control. It is inter-operable with GPS and Glonass, the two other global satellite navigation systems."
<<http://www.esa.int/esaNA/galileo.html>>, accessed 19 September 2012.

22 NIA, para 23.

- ⇒ consolidating spectrum required for the coordination of satellites in two major satellite frequency bands;
- ⇒ improving the interference and coordination dispute resolution process; and
- ⇒ permitting the use of an alternative reference radiation pattern for Earth station antennas, which may result in the more efficient use of geostationary orbits.²³

Australia's declarations and reservation

- 4.17 The ITU Constitution permits member states to make reservations at the time revisions to the Radio Regulations are agreed, and to maintain such reservations when notifying the ITU of its consent to be bound.²⁴
- 4.18 Reservations exclude or modify the legal effect of certain provisions of the treaty in their application to a member state.²⁵
- 4.19 It is also accepted international practice for member states to be able to make declarations at the time of signing or ratifying a treaty. A declaration differs from a reservation in that it does not purport to exclude or modify the legal effect of the treaty, but merely sets forth the State's interpretation of the treaty.²⁶
- 4.20 Given that revisions to the Radio Regulations are binding regardless of whether a member state consents or not, the use of declarations and reservations is relatively common. A number of member states made reservations and declarations to the Radio Regulations revision of 2012.²⁷
- 4.21 Australia made two such statements. The first permits Australia to take actions in its national interest if another state violates the regulations to Australia's detriment. In addition, the reservation keeps open the option for Australia to lodge further declarations or reservations at the time it ratifies the Radio Regulations revision of 2012. The reservation states:

In signing the Final Acts of the World Radio-communication Conference (Geneva, 2012), the delegation of Australia reserves for its Government the right to take any measures it might deem necessary to safeguard its interests if another Member State of the International Telecommunication Union in any way fails to respect the conditions specified in the Final Acts or if the reservations made by any Member State should be prejudicial to the operation

23 NIA, para 24.

24 NIA, para 11.

25 NIA, para 11.

26 NIA, para 11.

27 NIA, para 11.

of radio-communication services in Australia or its full sovereign rights.

The delegation of Australia further declares that it reserves for its Government the right to make declarations or reservations when depositing its instrument of ratification for amendments to the Radio Regulations adopted at this World Radio-communication Conference (Geneva, 2012).²⁸

- 4.22 The second reservation, to which there are a number of signatories,²⁹ counters claims by some equatorial countries, such as Columbia, to the ownership of geostationary satellite orbit slots. This statement has been made at all WRC meetings since 1995.³⁰ The second reservation states:

The delegations of the above-mentioned States, referring to the declaration made by the Republic of Colombia (No. 34), inasmuch as these and any similar statements refer to the Bogotá Declaration of 3 December 1976 by equatorial countries and to the claims of those countries to exercise sovereign rights over segments of the geostationary-satellite orbit, or to any related claims, consider that the claims in question cannot be recognized by this conference.

The above-mentioned delegations also wish to state that the reference in Article 44 of the Constitution to the “geographical situation of particular countries” does not imply recognition of a claim to any preferential rights to the geostationary-satellite orbit.³¹

Reasons for Australia to take the proposed treaty action

- 4.23 As noted earlier, amendments to the Radio Regulations bind member states of the ITU regardless of whether a member state consents to be so bound or not, so, arguments relating to the advantages of ratification for

28 NIA, para 12.

29 The Federal Republic of Germany, Australia, Austria, Belgium, Canada, the Republic of Croatia, Denmark, the Republic of Estonia, the United States of America, Finland, France, Georgia, Greece, Hungary, Ireland, Iceland, Italy, Japan, The Former Yugoslav Republic of Macedonia, the Principality of Liechtenstein, Luxembourg, Malta, the Republic of Moldova, Norway, New Zealand, the Kingdom of the Netherlands, the Republic of Poland, Portugal, the Slovak Republic, the Czech Republic, Romania, the United Kingdom of Great Britain and Northern Ireland, the Republic of Slovenia, Sweden, the Confederation of Switzerland and Turkey.

30 Mr Neil Meaney, Manager, International Regulatory Section, Australian Communications and Media Authority, *Committee Hansard*, 29 October 2012, p. 3.

31 NIA, para 12.

Australia are limited to the impact a failure to notify Australia's acceptance of the amendments will have on Australia's reputation in the ITU context.

4.24 According to the Department of Broadband, Communications and the Digital Economy:

The proposed treaty action would align Australia with the rest of the world in its regulation of the radiofrequency spectrum and would allow for continued international compatibility. Australia would retain its sovereign right to control transmissions within and into its territory and to protect Australian users from interference from foreign systems. Consenting to be bound by the revisions would make possible the introduction of new communication technologies, improved end user efficiencies, enhanced public safety and greater access to wireless networking and broadband data services. It would also continue Australia's good standing in the ITU and enable Australia to maintain its position that the geographical situation of particular countries does not enable them to claim any preferential rights to the geostationary-satellite orbit.³²

4.25 The Department points out that Australia's failure to notify its acceptance of the Radio Regulations revision of 2012:

...may have a negative effect on Australia's standing within the ITU and on Australia's negotiating position at future reviews of the Radio Regulations.³³

4.26 In contrast, notifying acceptance would:

...maintain Australia's good standing in the ITU and place Australia's administration of the radio frequency spectrum in line with the rest of the world.³⁴

4.27 The Department further argues that Australia has been a long term supporter of the ITU and its regulatory framework. Australia has been a member of the ITU and its predecessor organisations since federation.³⁵

32 NIA, para 4.

33 NIA, para 6.

34 NIA, para 6.

35 NIA, para 7.

Implementation

4.28 Australia's obligations under the Radio Regulations are implemented through the Australian Radiofrequency Spectrum Plan, which is prepared by the Australian Communications and Media Authority in accordance with Sections 30 and 34 of the *Radiocommunications Act 1992*. The existing Plan will be updated by the Authority to take account of the Radio Regulations revision of 2012.³⁶

Costs

4.29 According to the Department of Broadband, Communication and the Digital Economy, there are no identifiable direct costs to Commonwealth, State or Territory Governments arising from the proposed treaty action.³⁷

Conclusion

4.30 The binding nature of the Radio Regulations revision of 2012 means that a recommendation whether or not to take binding treaty action in relation to this treaty can have no impact on whether the amendments are implemented or not.

4.31 However, there are good reasons for the Committee to make a supportive recommendation.

4.32 The Department of Broadband, Communication and the Digital Economy has argued persuasively that a failure to ratify the Radio Regulations revision of 2012 will have a harmful impact on Australia's position within the ITU.

4.33 In the Committee's assessment, the revisions are sound and represent a stable regulatory environment for Australians to capitalise on technological improvements in communications.

4.34 In addition, the Committee notes the consultations with relevant parties undertaken by the Department prior to the Government's decision to support the Radio Regulations revision of 2012 indicated broad support for the amendments.³⁸

36 Mr Andrew Maurer, Assistant Secretary, Spectrum, Treaties and Internet Governance Branch, Department of Broadband, Communications and the Digital Economy, *Committee Hansard*, 29 October 2012, p. 2.

37 NIA, para 26.

38 Mr Andrew Maurer, Assistant Secretary, Spectrum, Treaties and Internet Governance Branch, Department of Broadband, Communications and the Digital Economy, *Committee Hansard*, 29 October 2012, p. 1.

- 4.35 Consequently, the Committee recommends that Australia notify the ITU of its support for the agreement.

Recommendation 4

The Committee supports the *Partial Revision of the 2008 Radio Regulations, as incorporated in the International Telecommunication Union Final Acts of the World Radiocommunication Conference (WRC-12)* done at Geneva on 17 February 2012 and recommends that binding treaty action be taken.

