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Spectrum Management and Telecommunications

Client Procedures Circular

Application Procedures for White Space Database Administrators (WSDBAs)

DRAFT

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Canada 

Preface

Client Procedures Circular CPC-4-1-01, issue 2, *Application Procedures for White Space Database Administrators (WSDBAs)*, replaces *Application Procedures for White Space Database Administrators (WSDBAs) issue 1*.

The following are the main changes:

1. Changes to the white space database administrator's Designation Agreement - Terms and Conditions
2. Editorial changes and clarifications have been made.

Issued under the authority of
the Minister of Innovation, Science and Industry

Martin Proulx
Director General
Engineering, Planning and Standards Branch

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Acronyms

CPC	Client Procedures Circular
DBS	Database Specification
DSA	Dynamic spectrum access
ISED	Innovation, Science and Economic Development Canada
RSS	Radio Standards Specification
SMS	Spectrum Management System
SMSE	Spectrum Management Spectrum Engineering
WSD	White space device
WSDB	White space database
WSDBA	White space database administrator

1. Purpose

Client Procedures Circular CPC-4-1-01, issue 2, *Application Procedures for White Space Database Administrators (WSDBAs)*, outlines procedures to be followed by applicants who wish to be considered by Innovation, Science and Economic Development Canada (ISED) for designation as a WSDBA to operate a white space database (WSDB). Such WSDBs shall determine the spectrum available for use by licence-exempt white space devices (WSDs) while ensuring the appropriate protection of licensed systems operating within the same frequency range, i.e. the white space frequency bands; 54-72 MHz, 76-88 MHz, 174-216 MHz, 470-608 MHz and 657-663 MHz. This document also defines the administrative and operational requirements that these WSDBAs shall meet in order to maintain their designation status.

2. Mandate

The Minister of Innovation, Science and Industry, through the [Department of Industry Act](#), the [Radiocommunication Act](#) and the [Radiocommunication Regulations](#), with due regard to the objectives of the [Telecommunications Act](#), is responsible for spectrum management in Canada. As such, the Minister oversees the development of national policies and goals for spectrum resource use and ensures effective management of the radio frequency spectrum.

In accordance with subsection 3(4) of the *Radiocommunication Act*, any power, duty or function under the Act or the *Radiocommunication Regulations* may be exercised or performed by any person authorized by the Minister to do so and, if so exercised or performed, shall be deemed to have been exercised or performed by the Minister.

3. Definitions

Available frequencies : A range of frequencies and/or channels that are deemed to be available by a white space database (WSDB) as available for use by a white space device (WSD) at a specific time and geographic location.

Protected radio systems: Radio systems that are protected by a WSDB from interference by the operation of licence-exempt WSDs in the same frequency band.

White space device (WSD): A type of radio apparatus that operates in the white space frequency bands using dynamic spectrum access techniques

White space database (WSDB): An ISED-designated database that maintains records of protected licensed services and systems operating within the white space frequency bands. The WSDB determines available channels for use by WSDs at a specific time and geographic location.

White space database administrator (WSDBA): A service provider designated by ISED to administer a WSDB within Canada.

4. Related documents

All ISED publications related to spectrum management and telecommunications are available on the [Spectrum Management and Telecommunications](#) website. Additional information and references related to DSA systems are available on ISED's [Dynamic Spectrum Access](#) webpage. Refer to the following documents as needed:

DBS-01	White Space Database (WSDB) Specifications
RSS-222	Radio Standards Specification on White Space Devices (WSDs)
SMSE-012-12	Framework for the Use of Certain Non-Broadcasting Applications in the Television Broadcasting Bands Below 698 MHz
SMSE-003-19	Decision on the Technical and Policy Framework for White Space Devices
SPB-001-24	Decision on New Access Licensing Framework, Changes to Subordinate Licensing and White Space to Support Rural and Remote Deployment

5. Policy

Designated WSDBAs responsible for operating WSDBs will ensure effective sharing of the radio spectrum with licensed users when providing available frequencies to licence-exempt WSDs.

The Minister will designate such WSDBAs for operation in Canada in accordance with the requirements outlined in this document. As part of these requirements, designated WSDBAs will enter into contractual agreements with ISED for the purpose of maintaining their designation status. Such databases, managed by the WSDBAs, will identify available frequencies for use by certified WSDs based on their respective geographic areas.

6. Background

In October 2012, ISED released SMSE-012-12, [Framework for the Use of Certain Non-Broadcasting Applications in the Television Broadcasting Bands Below 698 MHz](#), allowing the operation of licence-exempt white space devices (WSDs) in the white space frequency bands. In this framework, ISED outlined general policies for the protection of licensed systems in the band through the use of geolocation and the establishment of database-driven systems operated by WSDBAs. Such database-driven systems will inform a registered WSD operating in the band which white space frequencies are available for use at the device's location. The systems would also be used to register the locations of fixed WSDs as well as the protected locations and frequencies of licensed incumbent services. In March 2019, ISED made updates to this framework in SMSE-003-19, *Decision on the Technical and Policy Framework for White Space Devices*. In January 2024, ISED made further updates to this framework in SPB-001-24, *Decision on New Access Licensing Framework, Changes to Subordinate Licensing and White Space to Support Rural and Remote Deployment*.

Database Specification DBS-01, [White Space Database \(WSDB\) Specifications](#), sets out the technical requirements for the designation of a white space database administrator (WSDBA) and for the operation of a white space database (WSDB) capable of identifying available frequencies and associated maximum power levels for use by white space devices (WSDs) operating in the white space frequency bands.

Under the framework of DBS-01, any eligible applicant may seek designation by ISED to become a WSDBA, provided that they meet related technical and operational requirements. The process for this is described further in Section 9 of this document.

7. Eligibility

Any prospective WSDBA is eligible to apply for designation by ISED. In order to be designated, applicants shall follow the procedures set out in this document and demonstrate that they meet all requirements.

In order to be eligible for designation, a prospective WSDBA shall establish and agree to maintain a business office and a delegated representative within Canada. Additionally, the WSDB shall be available for assessment by ISED during the system evaluation and testing phase. ISED will assess whether the WSDB is operating effectively and is compliant with all applicable technical requirements.

8. Access to ISED's licensing information

During the development process of the WSDB, access to ISED's licensing information is required. Access to the ISED licensing information is available on the [Spectrum Management System Data](#) webpage. Refer to the 'White Space Data Extract' section for the information required by WSDBs.

9. WSDBA designation process

There are three key phases to the WSDBA designation process:

1. the application phase
2. the evaluation and testing phase and
3. the designation for operation in Canada phase

The applicant will need ISED's approval for the completion of each phase before moving onto the next phase of the WSDBA designation process. The following sections provide a description of the process.

9.1 WSDBA application phase

Applications received for designation as a WSDBA will be assessed on a first-come, first-served basis. Applications should be directed to the ISED point of contact identified in section 16 of this document.

If the application for designation includes information that is confidential or proprietary in nature, a WSDBA applicant shall indicate this to ISED.

9.1.1 Application receipt

In order for the application to be received by ISED and considered for designation status, applicants shall submit the required applicant information and system information listed in annex A and annex B, respectively.

When completing the application, the prospective WSDBA shall demonstrate to ISED that they possess sufficient technical expertise to establish and administer a WSDB in accordance with the requirements outlined in the [DBS-01](#) standard.

Applicants are encouraged to consult with ISED (contact information provided in section 16) prior to submitting an application, to ensure that all required information has been sufficiently addressed.

9.1.2 Application review

ISED will only evaluate complete applications. Should insufficient information be submitted, or other problems arise due to missing or inconsistent information, the applicant will be contacted to provide clarifications or supplementary information.

ISED will review submitted information against the application requirements of this document and the requirements in the [DBS-01](#) standard. Only applicants that meet the requirements of both documents (CPC-4-1-01 and DBS-01) will be eligible to become a designated WSDBA.

9.2 WSDB system evaluation and testing phase

Once the application phase has been completed and the submitted information is approved by ISED, the WSDBA designation process moves to the evaluation and testing phase.

During the evaluation and testing phase, the WSDBA shall first test its WSDB according to the test plan submitted under item B1 of annex B and approved by ISED. The WSDBA shall demonstrate that its WSDB meets the requirements of the [DBS-01](#) standard by successfully completing all the test cases included in the test plan and sharing the test results with ISED for review.

Once the WSDBA's test results have been reviewed and approved by ISED, the WSDBA shall provide ISED with access to a test environment of its WSDB. ISED will then evaluate and test the WSDB to ensure that it complies with the requirements set out in the DBS-01 standard. Should insufficient information be provided or inconsistencies or errors arise when evaluating the WSDB against the DBS-01 standard, the applicant will be contacted to provide clarifications, provide supplementary information, or make modifications to the WSDB.

As part of the evaluation and testing phase, the WSDBA may also be required to grant ISED access to:

- certain elements of the WSDB
- certain functions performed by the WSDB and/or
- intermediate values obtained from internal calculations performed by the WSDB, including but not limited to geographical values describing the protected geographic areas around protected licensed systems

Additionally, ISED may require the WSDBA to provide detailed examples of calculations performed by the WSDB.

9.3 WSDBA designation for operation in Canada phase

Once the WSDB evaluation and testing phase has been completed and approved by ISED, the next phase is to designate the WSDBA for operation in Canada.

9.3.1 Execution of the designation agreement

Following successful evaluation and testing, ISED shall arrange the execution of a designation agreement in the sample format outlined in section C1 of annex C.

9.3.2 Designation letter

Upon successful completion of the application phase, system evaluation and testing phase, and execution of the designation agreement, ISED will issue a designation letter to the successful applicant in the sample format outlined in section C2 of annex C.

10. Website listing

A list of all designated WSDBAs will be made available on ISED's [Dynamic Spectrum Access](#) webpage.

11. Disclaimer

ISED's designation of a WSDBA does not imply or otherwise suggest promotion or recommendation of the services offered by the WSDBA, nor does the designation imply or suggest that the WSDBA is an agent or otherwise a representative of ISED.

12. Retaining designation status

In order to maintain its designation status, a WSDBA shall, on an ongoing basis, meet all requirements of the terms and conditions of the executed WSDBA designation agreement with ISED. As such, a WSDBA shall ensure that it remains compliant with any new requirements established by ISED and shall demonstrate this to ISED if requested to do so.

12.1 Retaining designation status due to new technical and/or operational requirements

This section and its subsections provide additional information on the process for retaining designation status due to the introduction of new technical and/or operational requirements for WSDBs, e.g. upon the publication of new issues of the [DBS-01](#) standard.

WSDBA's wishing to retain their designation status shall take the required steps, if any, to update their WSDB with the new technical and/or operational requirements and shall demonstrate compliance to ISED, if requested to do so, following a three-phase process: the application, the evaluation and testing, and the reconfirmation of designation.

12.1.1 Application for retaining designation status due to new technical and/or operational requirements

A WSDBA shall submit an application to ISED for retaining the designation under the new technical and/or operational requirements following a similar process to the one outlined in section 9.1 of this document.

The application for retaining designation under new requirements is subject to review and approval by ISED and shall:

- demonstrate the WSDBA's intention to maintain its designation status and to align with the new requirements
 - provide a description of any changes made to the WSDB to align it with the new requirements along with an estimated timeline for the changes to be completed
- provide a description of any changes and/or updates to the latest WSDBA applicant information (annex A) previously submitted to ISED
- provide a description of any changes and/or updates to the latest WSDB information (annex B) previously submitted to ISED

Should insufficient information be provided, the applicant will be contacted to provide clarifications or supplementary information.

12.1.2 Evaluation and testing due to new technical and/or operational requirements

Once the application for retaining designation is approved by ISED, the WSDBA moves to the evaluation and testing phase, if needed, following a similar process to the one outlined in section 9.2 of this document. ISED will require the evaluation and testing of the WSDB in certain cases where it determines that the changes are significant enough for evaluation and testing to be warranted. ISED will ensure that the WSDB complies with the new technical and/or operational requirements and may perform additional testing of other elements of the WSDB to ensure that it maintains compliance with all other requirements set out in the [DBS-01](#) standard.

12.1.3 Reconfirmation of WSDBA designation status due to new technical and/or operational requirements

Once the WSDB evaluation and testing phase has been completed and approved by ISED, the next phase is to reconfirm the designation of the WSDBA under the new requirements. It is anticipated that in most cases, the designation agreement already in place with the WSDBA

would not be affected by new technical and/or operational requirements and shall thus continue to remain in effect.

Upon successful eligibility for continuation of the designation, ISED will issue a new designation letter to the WSDBA. This will be based on the sample WSDBA designation letter provided in section C2 of annex C.

13. Interference resolution procedures

In cases of harmful interference, as defined in the [Radiocommunication Act](#), to protected radio systems suspected to be caused by a white space device, the radio user experiencing such interference should report the problem to its nearest ISED Spectrum Management office. A list of ISED's offices is provided in the Radiocommunication Information Circular RIC-66, [Addresses and Telephone Numbers of District Offices](#). The procedure for investigating harmful interference to protected radio systems is set out in section 5 of ISED's [Spectrum and Telecommunications Service Standards](#).

Where ISED determines that interference is being caused by a particular white space device, the Minister may issue an order to the operator of the device to cease or modify operation of the device under the [Radiocommunication Regulations](#) or pursuant to paragraph 5(1)(l) of the [Radiocommunication Act](#) where there is harmful interference.

In any case where there is interference being caused by a particular white space device, ISED may, upon written request, require a WSDBA:

- to cease to provide available frequencies to the interference-causing white space device or within a specified geographic area
- to take appropriate corrective actions to resolve interference concerns, linked to the WSDB operating problems or deficiencies and/or the WSDB's failure to meet technical and/or operational requirements as set out in the [DBS-01](#) standard.

Failure to comply with ISED's written requests related to interference may result in the revocation of a WSDBA's designation status.

14. Revocation of designation and subsequent designation

ISED's revocation procedures of the WSDBA designation will follow the terms set out in the agreement with the WSDBA. ISED may revoke the designation of a WSDBA due to non-compliance with any ISED requirements, including failure to comply with ISED's written requests related to interference as specified in section 13 above.

Designation will also be revoked upon joint consent by ISED and the WSDBA to terminate the agreement.

A WSDBA whose designation status has been revoked by ISED will be removed from ISED's list of designated WSDBAs.

A WSDBA whose designation status has been revoked and who wishes to be redesignated

may submit a new application for designation.

15. Auditing procedure

ISED may audit a WSDBA's WSDB operations at any time to ensure compliance with the agreement's terms and conditions, including technical and operational requirements.

Designated WSDBAs shall provide ISED with any requested information or documentation as required for completion of such an audit within 30 calendar days of the date of the initial request.

Where it is determined by ISED that a WSDBA is not in compliance, immediate corrective actions shall be taken by the WSDBA to ISED's satisfaction in order to maintain the designation status. Failure to take such corrective actions, within the time period specified by ISED, may result in ISED's suspension or revocation of the designation status.

16. Contact information

All application submissions and enquiries concerning application procedures and requirements should be directed to the office of:

Innovation, Science and Economic Development Canada
Directorate of Coordination and Terrestrial Engineering (DCTE)
235 Queen St.
Ottawa ON K1A 0H5

Email: dynamicspectrumaccess-accesdynamiqueauspectre@ised-isde.gc.ca

Annex A: Required white space database administrator applicant information

- A1.** The applicant shall provide a list of the appropriate contact information of its personnel/representatives responsible for the application, including full names, telephone numbers, corporate email addresses, and mailing addresses.
- A2.** The applicant shall provide a copy of its certificate of incorporation, including any bylaws, addenda, and appendices. This is not required if such information has already been provided to Innovation, Science and Economic Development Canada prior to the application and this information remains unchanged.
- A3.** The applicant shall provide a description of its corporate business structure and identify any existing or anticipated business partners or affiliates.
- A4.** The applicant shall provide the street address of its business office in Canada and the contact information of the individual(s) delegated as its representative(s) in Canada, including the corporate mailing address(es).
- A5.** The applicant shall provide details of the geographic locations where any element of the WSDB is hosted.
- A6.** The applicant shall indicate anticipated milestone dates for WSDB development (if any), and the expected date for bringing the proposed WSDB into full operation.

Annex B: Required white space database (WSDB) information

- B1.** The applicant shall provide a test plan, including specific test cases intended to demonstrate how the WSDB will meet all requirements outlined in the DBS-01, [White Space Database \(WSDB\) Specifications](#) standard. The test plan is subject to review and approval by Innovation, Science and Economic Development Canada.
- B2.** The applicant shall provide a description of any alternate methodologies and/or optional requirements, if permitted in the DBS-01 standard, which were drawn upon. If the applicant chose to implement an alternate methodology, they shall provide a description of their implementation and demonstrate that it is based on sound and standard engineering practices and ensures the appropriate protection of licensed systems.
- B3.** The applicant shall provide technical diagrams illustrating the architecture of the WSDB, and a detailed description of how each function operates and interacts with other functions. The applicant shall also identify each element in the system architecture that is essential to operational and interference control. In addition, the applicant shall indicate where such essential elements are hosted.
- B4.** The applicant shall include a description of the methods (e.g. interfaces, protocols) that will be used for secure communication between the WSDB and its associated white space devices and the procedures, if any, which it plans to use to verify that communication is effective.
- B5.** The applicant shall include a description of the security methods that will be used to protect against unauthorized parties accessing or altering the WSDB or otherwise corrupting the operation of the system in the performance of its intended functions. The applicant shall also include a description of the methods that will be used to protect any sensitive or personal information against loss or theft, as well as unauthorized access, disclosure, copying, use, or modification of the information.
- B6.** The applicant shall provide a detailed description of any open-source software used in the WSDB and demonstrate that its use is based on sound and standard engineering practices and that it was developed with sufficient technical expertise.
- B7.** If the applicant will not be performing all system functions, they shall provide information on all other entities performing these functions, and their business relationships to the applicant. In particular, the applicant shall address how ISED will be assured that all requirements of designated system administration are satisfied when functions are divided among multiple entities. This include a description of how data will be transferred among various entities and other systems, and the expected schedule of such data transfers.

Annex C: WSDBA designation phase

If a white space device database administrator (WSDBA) application is received by Innovation, Science and Economic Development Canada (ISED) and its evaluation and testing phase proves to be successful, the WSDBA applicant will then be required to sign a designation agreement with ISED before it can be designated by the Minister of Innovation, Science and Industry. Following the execution of the designation agreement, a designation letter is issued to the WSDBA.

Section C1 below includes a sample of text proposed to be included in the designation agreement with the WSDBA, denoting typical requirements for the terms and conditions.

Section C2 below includes a sample of text proposed to be included in the designation letter issued to the WSDBA.

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C1. Sample WSDBA designation agreement

This agreement is between Innovation, Science and Economic Development Canada (ISED) and [Company Ltd.], hereinafter referred to as the white space database administrator (WSDBA).

The WSDBA's representative executing this agreement below certifies having the authority to bind the WSDBA, which agrees, for good and valid consideration, the receipt and sufficiency of which is hereby acknowledged, to abide by all of the terms and conditions herein.

WSDBA Designation Agreement - Terms and Conditions

1. The WSDBA certifies that all information submitted to Innovation, Science and Economic Development Canada (ISED) in relation to its designation application is accurate and complete, and that it will promptly (but in no event later than 30 calendar days subsequently) notify ISED if it becomes aware of any material change in this information. It is a breach of this Agreement to knowingly provide inaccurate information or to fail to disclose a material change to ISED.
2. The WSDBA has a business office located in Canada and a delegated individual as its personnel/representative in Canada, and agrees to always maintain one or more delegated individuals as its personnel/representatives in Canada at all times. The mailing address of the business office and the contact information of the representative are set out in Schedule "A" of this Agreement. The WSDBA will also make contact information available to the public and strive to provide timely responses to complaints or enquiries from customers, equipment manufacturers, spectrum users or any other party.
3. Any requests for information from the WSDBA or notices to the WSDBA under this Agreement may be sent to the delegated representative at the coordinates set out in Schedule "A" via standard mail or email as appropriate. Any information that the WSDBA is required to forward to ISED may be sent via standard mail to 235 Queen Street, Ottawa, Ontario K1A 0H5 or via email at dynamicspectrumaccess-accesdynamiqueauspectre@ised-isde.gc.ca. Information provided pursuant to this Agreement may be exchanged either by standard mail or by email. The WSDBA shall notify ISED in a timely manner of any change in the mailing address of the business office or the contact information of the delegated representative provided in Schedule "A".
4. The parties agree that, irrespective of the hosting location of the WSDB, the laws of the province/territory in which the WSDBA's business office is physically located shall apply to this Agreement.
5. The WSDBA shall not promote its designation status to provide WSDB services beyond the scope of this Agreement, nor indicate that it is an agent or representative of ISED or the Government of Canada. This does not limit the WSDBA from providing additional value-added services outside the scope of this designation.

6. The WSDBA may charge fees for providing available frequencies and associated maximum power levels to WSDs. ISED may review the fees and require modifications to those fees if ISED finds them unreasonable.
7. The WSDBA shall provide available frequencies and associated maximum power levels in a non-discriminatory manner for every white space device under the control of the WSDB system.
8. The WSDBA is not permitted to charge fees for the registration of licensed stations (e.g. low power apparatus and TV receive sites) with the WSDB.
9. The WSDBA agrees that it will comply on an ongoing basis with all procedures, technical and operational requirements, as set out in this document and in DBS-01, White Space Database Specifications, as amended from time to time. In addition, the WSDBA must keep abreast of all relevant ISED regulations, policies, procedures, requirements, standards and specifications, and amendments thereto related to the operation of WSDs and WSDBs in Canada. This may include active participation in evaluation tests, discussion groups, meetings, or teleconferences established as deemed necessary by ISED to facilitate or address WSDB issues.
10. The WSDBA shall strive to maintain continuous operation of the WSDB and provide notifications to its customers and ISED when it becomes temporarily unavailable (whether planned or unplanned).
11. The WSDBA shall make publicly available all information required by ISED related to the locations and parameters of operations of registered WSDs and of voluntarily submitted protected systems (e.g. low-power apparatus and TV receive sites); this requirement excludes personal contact information. The WSDBA is not permitted to charge fees for the public examination of this information.
12. The WSDBA shall permit, upon request from ISED and in a timely manner, a licensee to examine the WSDB's calculation results, including radio system contours, pertaining to the protection of the licensed systems of that licensee.
13. The WSDBA shall not make publicly available the individual location of personal/portable WSDs.
14. The WSDBA shall not compromise the privacy of users of its services at any time. Any time the WSDBA or any party that it contracts with collects, uses or discloses personal information during commercial activity, including transfer for third party processing, it must comply with the relevant portions of the [Personal Information Protection and Electronic Documents Act](#), as amended, or substantially similar Provincial/Territorial legislation, where applicable. No matter where and how personal information is stored, the WSDBA must maintain adequate security safeguards to protect personal information against loss or theft, as well as unauthorized access, disclosure, copying, use, or modification. At any time, ISED may, in writing, request

details of the current security safeguards used by the WSDBA or any party it contracts with and that information must be provided within the timeframes and in the format specified in ISED's written request

15. Unless otherwise stated in this Agreement, the WSDBA is not required to disclose any information that it may collect to support additional services.
16. ISED may audit or investigate compliance with terms and conditions of this Agreement at any time; the WSDBA shall be required to provide any information or documentation as required, typically within 30 calendar days of the date of request.
17. The WSDBA agrees to cooperate with ISED in any review or audit of its WSDB operations, and to provide any information that ISED may request in order to ensure compliance. Irrespective of the hosting locations of the elements of an WSDB and any data stored within it, the WSDBA shall provide access to ISED for review and audit purposes.
18. The WSDBA shall address all complaints forwarded to it by ISED regarding potential non-compliance with terms of designation, shall implement the necessary corrective action(s), and shall report back to ISED within 30 calendar days. Failure to reply in a satisfactory and timely manner will be considered by ISED as a potential breach of this Agreement. Where there is any complaint about interference sent directly to the WSDBA, the WSDBA shall keep a record of the complaint and its responses to the complaint and shall provide that information to ISED.
19. The WSDBA shall provide ISED with access to detailed logs of WSD queries and responses contained in its WSDB, for the purposes of evaluation and enforcement.
20. The WSDBA shall comply with any written requests from ISED related to interference. ISED may request the WSDBA to cease to provide available frequencies to an interference-causing WSD or within a specified geographic area. ISED may also request the WSDBA to resolve interference concerns linked to the WSDB operating problems or deficiencies; and/or the WSDB failure to meet technical and/or operational requirements as set out in the [DBS-01](#) standard.
21. The WSDBA shall permit ISED to examine its repository of incumbent licensee information obtained from ISED's [Spectrum Management System](#) and any other information registered with the WSDB (e.g. WSD registration information) to allow for the detection and correction of errors, resulting either from an inadvertent entry of incorrect data or as a result of a deliberate entry of false data in the WSDB
22. In addition to any other reporting requirements, the WSDBA will provide ISED, by March 31 each year and also upon request from ISED, with a report and statistical information regarding overall WSDB performance, operational issues, developments such as new features offered to users, complaints or enquiries received, including the timing and content of responses provided and efforts at resolution, and incidents of WSDs causing interference to protected licensed systems. This report shall address the above-noted matters for the previous calendar year, and will be provided to ISED in a suitable format

for assessment.

23. Where it is determined by ISED that a WSDBA is not in compliance with the terms and conditions of this Agreement, the WSDBA must take immediate corrective actions, to the satisfaction of ISED, in order to maintain designation status. Failure to take such corrective actions may result in ISED's suspension or revocation of the WSDBA's designation status.
24. Without prejudice to any other remedies available at law, in the event of any breach of this Agreement by the WSDBA, ISED may take any or all of the following actions:
 - a. provide notice of the breach and a timeline within which the breach must be remedied;
 - b. enforce the terms of this Agreement via a court order;
 - c. require that the WSDBA provide a separate enforceable undertaking to do or refrain from doing something under this Agreement;
 - d. declare that this Agreement is terminated with or without the consent of the WSDBA; and
 - e. revoke the designation of the WSDBA.
25. The WSDBA agrees that it is responsible to take appropriate steps to transfer registration data and other relevant information, in a timely manner, to another designated WSDBA prior to ceasing its operations or to the termination of this Agreement in order to ensure the continuity of operation of the WSDs that communicate with its WSDB. In the event that there are no other designated WSDBAs available for the transfer, the WSDBA must notify ISED in a timely manner and take appropriate steps to transfer the information to ISED instead.
26. In the case where a WSDBA's designation status has been revoked by ISED or where this Agreement is terminated, the WSDBA will be removed from ISED's list of designated WSDBAs.
27. The WSDBA and ISED may terminate this Agreement upon joint consent, or upon provision of 90 calendar days' advance notice by either the WSDBA or ISED. In addition, ISED may terminate this Agreement at any time upon confirmation of breach of terms or conditions of this Agreement by the WSDBA, in accordance with paragraph 24 (d) above.

Upon termination of this Agreement, the WSDBA shall follow the procedure specified in paragraph 25 above.

- 28. This Agreement may be amended in writing upon consent of both parties.
- 29. The invalidity or unenforceability of any provision of this Agreement shall not affect the validity and enforceability of any other provision of this Agreement, which shall remain in full force and effect.

Dated at [location] this [day]
Day of [month], [year]

Dated at [location] this [day]
Day of [month], [year]

[First name, Last name]
Director General
Engineering, Planning and Standards Branch
Spectrum and Telecommunications Sector
Innovation, Science and Economic
Development Canada

[First name, Last name]
[Position]
[Company Ltd.]

Schedule "A"

Business Office of the WSDBA

[Company Ltd.]
[Address]

Attention: [delegated individual]
Email: [email address]
Phone: [phone number(s)]

C2. Sample WSDBA designation letter

[Date]

[Company Ltd.]

[First name, Last name], [CEO/Director]

[Address]

Dear [First name, Last name]:

This letter certifies that [designated WSDBA's name] is designated by Innovation, Science and Economic Development Canada (ISED) to operate white space database (WSDB) system in Canada.

This designation is subject to the conditions outlined in Client Procedures Circular CPC-4-1-01, Application Procedures for Automated Frequency Coordination System Administrators (WSDBAs) and Database Specification DBS-01, [White Space Database \(WSDB\) Specifications](#), as well as the "WSDBA Designation Agreement" as signed by the applicant on [date].

Your designated WSDBA identification number is: [WSDBA ID number].

Thank you for participating in this important function for the successful deployment of white space devices in Canada.

[First name, Last name]

Director General,

Engineering, Planning and Standards Branch

Spectrum and Telecommunications Sector

Innovation, Science and Economic Development Canada