Training Manual
39a. IONSCAN 600

Document Details

Document	IONSCAN 600
Applies To	J&I Contract
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Last Approved	23/08/2018
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Document Control

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Version	1.0
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Date	23/08/2018

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39a. IONSCAN 600

Amendment Details

Version	Description	Issue Date
v1.0	Initial Version	23/08/2018

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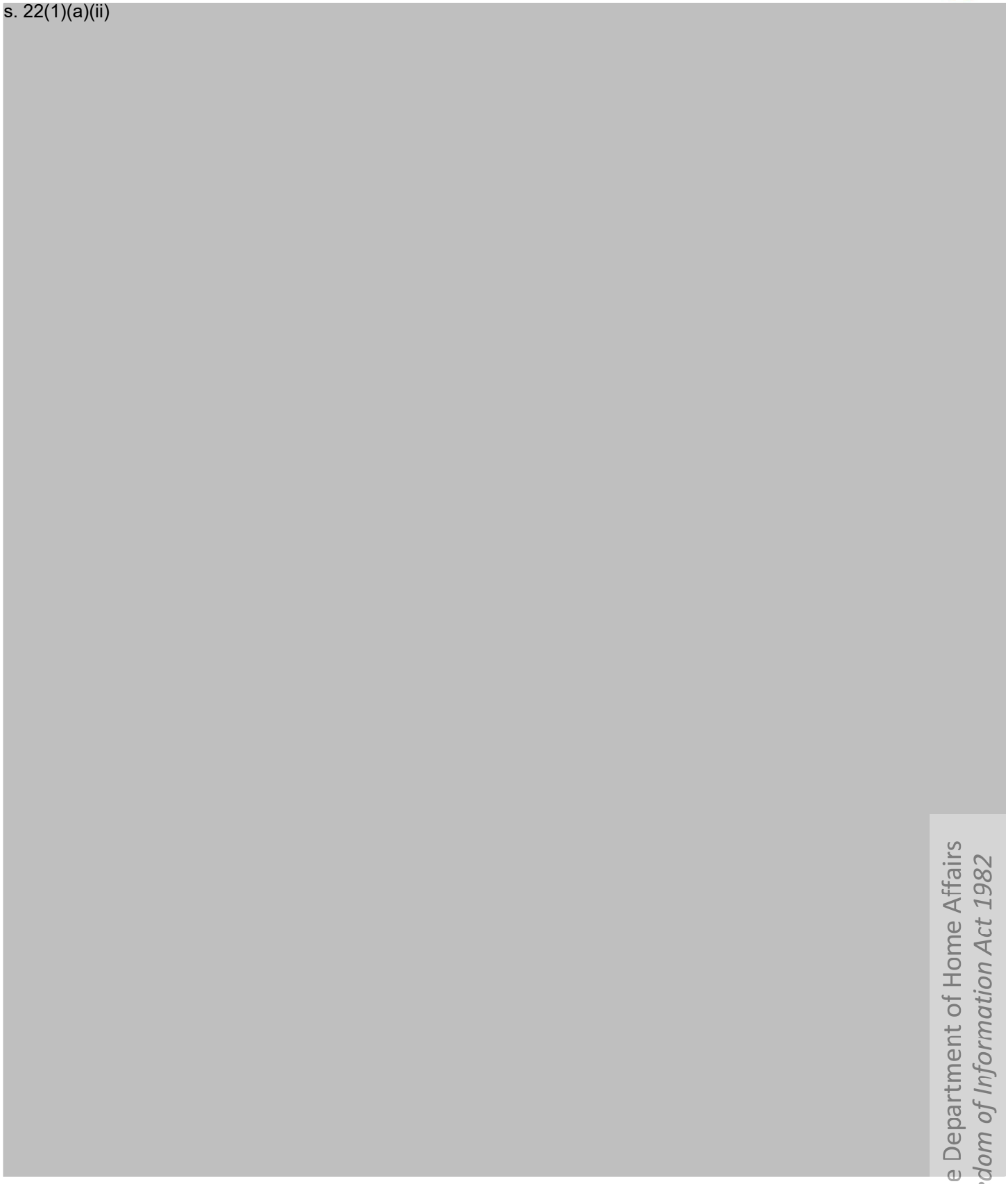

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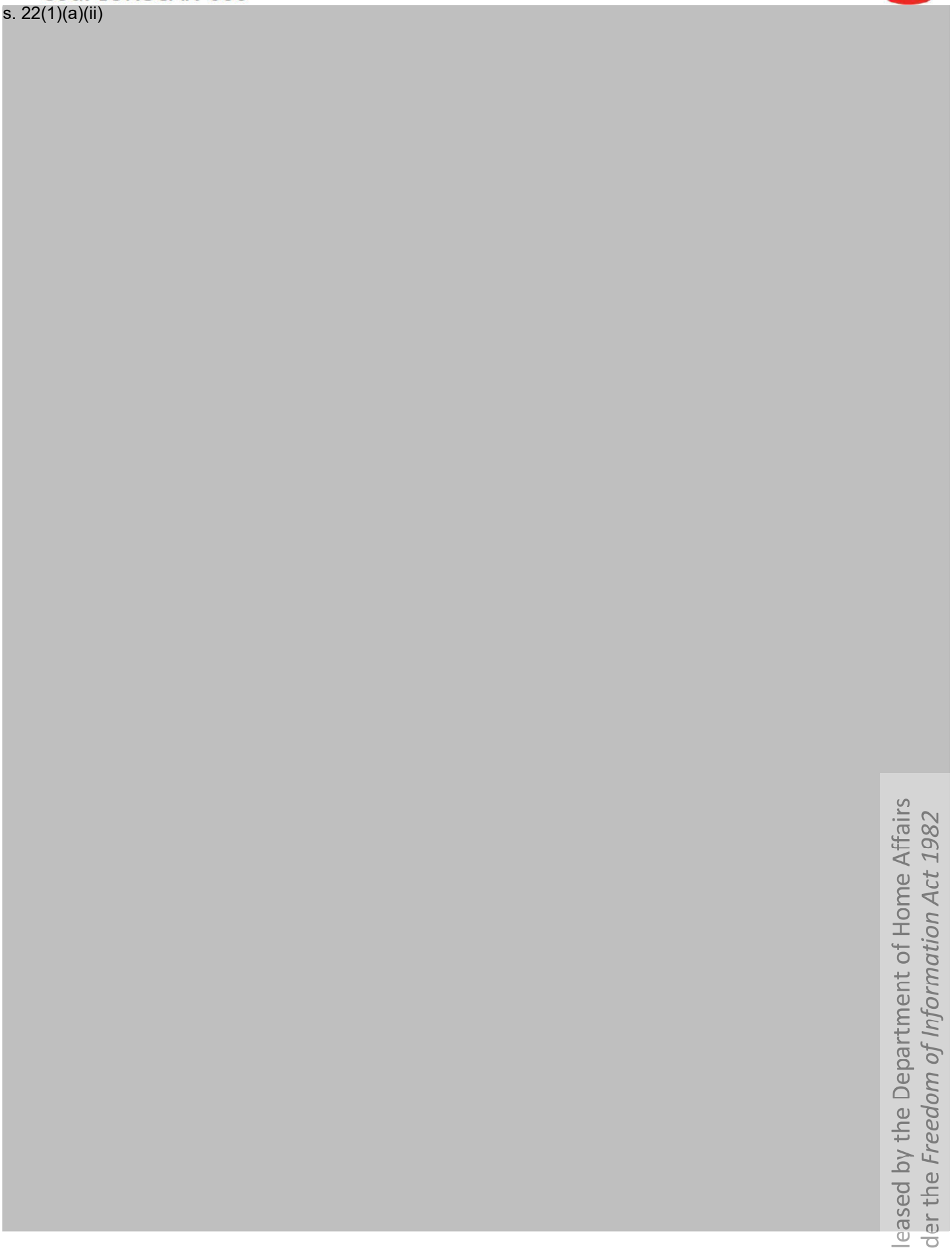

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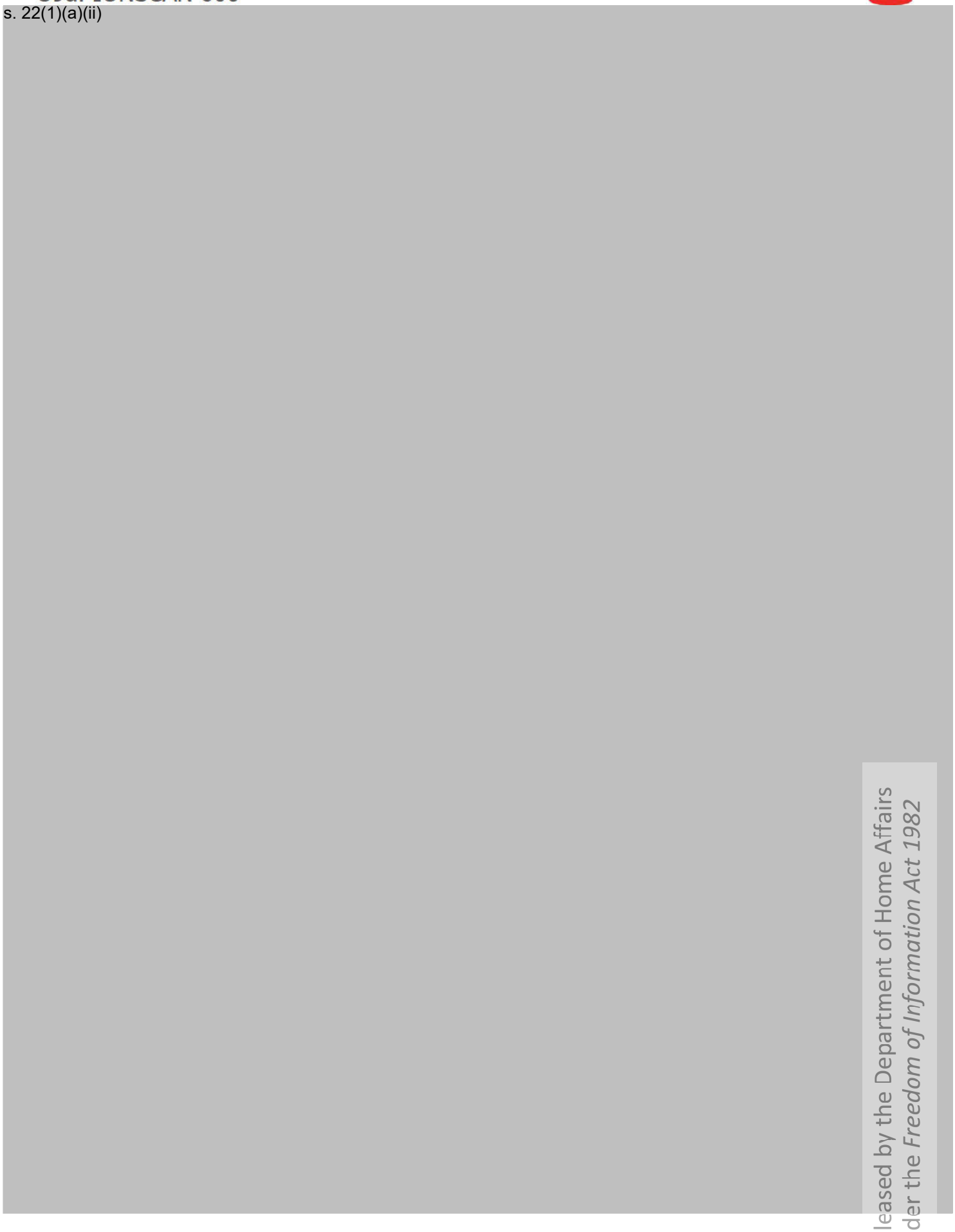

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8. Verification (Verific)

Verification is to be performed at the beginning of every shift, prompted to be conducted every 8 hours and any time the operator needs assurance that the IONSCAN 600 is working properly. If a verification has recently been performed, the initial screen prompts the user to start an Analysis.

If a verification is scheduled and not performed or the unit has been shutdown, a verification will be required at restart. The initial screen will prompt the user to perform a Verification.

8.1 Priming the Verification Pen

Before a verification of the system can be performed the "Verification Pen" needs to be primed. This will allow the Officer performing the verification to apply a small amount of the "Verific Fluid" to a "Swab" to conduct the testing.

To prime the pen:

- Firstly, shake the pen for a few seconds to combine the liquid;
- Remove cap from the pen;
- Press and release the tip of the pen 1 – 3 times against the indent in the back of the pen Cap, (see Figure 15);
- Stopping as soon as the tip is visibly wet, Verifc fluid should bleed visibly when applied if it does not, prime the tip again;
- Immediately recap the pen to prevent it from drying out;
- If the verification standard dries out after its first priming, re-prime the pen using the same method.

* **Note**: Ensure that when placing the pen lid back on that it "Clicks" into place. This will ensure that the pen doesn't dry out and the liquid doesn't leak. The pen is to be kept out of direct sunlight and away from heat.

Figure 15 – Priming the "Verification Pen".

8.2 P/N1824019 Sample Swab

It is possible to take samples with the swab either with or without the use of the specifically designed "Wand". Ensure that only the Smiths supplied sampling swabs, (P/N 1824019) are used with the IONSCANN 600, (see Figure 16).

The sample swab is designed with an alignment hole on the "Right" side of the swab, to ensure proper sample introduction, (sample side facing towards the front of the unit). The swab is used for both performing a verification and taking a sample during operational use.

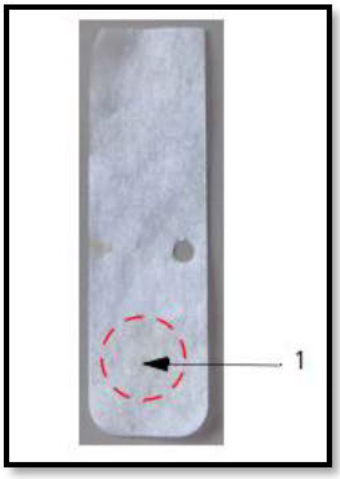

Figure 16 – (1.) "Sampling" area on P/N1824019 swab.

8.3 Performing a Verification

When running a verification ensure the IONSCAN 600, sample swab, work area and the user do not become contaminated. Do not rest the swab on any surface when applying the verification fluid. Failure to follow this instruction may result in the surface of the swab becoming contaminated, resulting in an incorrect analysis.

To perform a verification:

- From the "Home" menu, touch the "Verific" icon (see Figure 17a);
- The screen will now ask for a swab to be inserted (see Figure 17b);
- Wearing clean approved "Screening" gloves, hold out a new swab;
- Remove the verification pen cap and lightly apply a small amount of the verification fluid, no more than a dot, to the "Sample Area" of the swab (see Figure 18a);
- Hold the swab in the air while and allow time for the verification fluid to completely dry, (approx. 10sec);
- Insert the end of the swab with the rounded corners into the sampling inlet until it touches the bottom. Ensure that the alignment hole is on the "Right" side and the sampled area and is facing the front of the unit, (see Figure 17b);
- Analysis will begin automatically; a progress screen displays while the analysis is running.

Figure 17a & 17b – "Verific" selected on the "Home" screen, "Verific" screen awaiting swab.

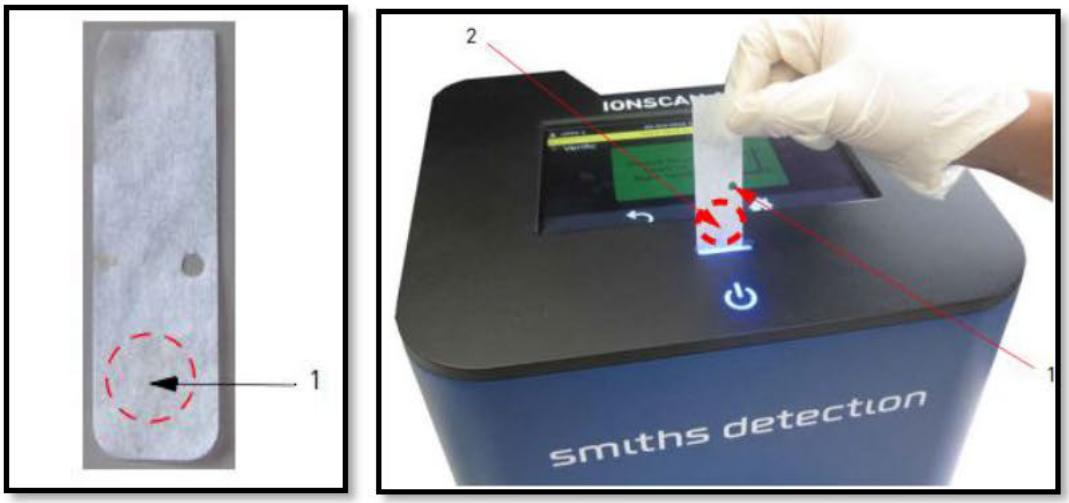

Figure 18a & 18b - 1. "Sample Area" on swab & swab inserted correctly, alignment hole (1.) to the right.

8.3.1 Successful Verification

Following a successful verification:

- Remove the swab as indicated on the Verific Successful screen, (see Figure 19);
- Touch the message bar to acknowledge the verification, (see Figure 20).

An automatic clean process will start with the removal of a swab. If the alarm screen still displays, touch the screen on the message bar to acknowledge and clear the Verific notice. Once the Verific notice has been cleared, the "Main Menu" screen will open up again.

Figure 19 – Verific Successful screen display, remove the sample swab.

Figure 20 – (1.) Message Bar, "Press To clear Verific Notification" screen.

8.3.2 Unsuccessful Verification

If the verification process is unsuccessful, indicated by a "Verific Failed" yellow screen (see Figure 21). The verification process will need to be reattempted. Firstly, view the list of detected substance(s), touch the "Details" icon, (see Figure 20), to determine the cause of the fail.

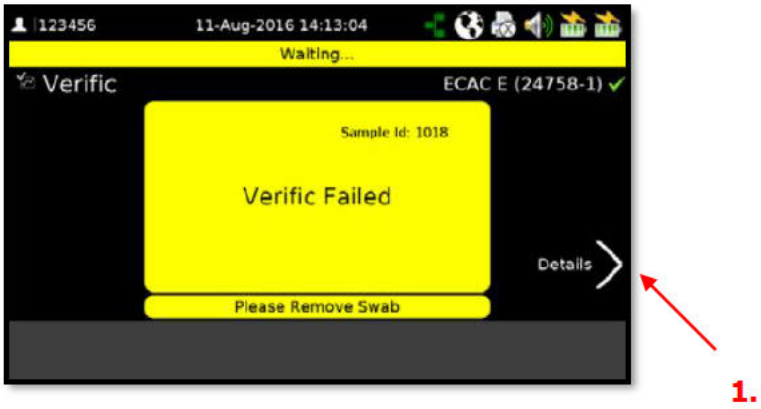

Figure 21 – "Verific Failed" screen, (**1.**) "Details Tab.

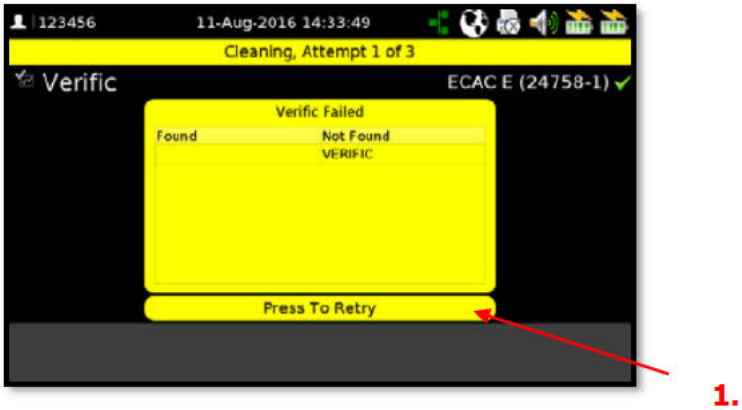

Figure 22 – (**1.**) "Press to Retry" verification process. Note: "Verific Not Found".

The most likely reason for a "Verific Unsuccessful" is there was no Verific fluid on the sample swab. Check that the pen is not spent or that the cap has not been left off. Remove the swab and touch "Press to Retry", (see Figure 22).

Remove the swab & a cleaning cycle will automatically run. Upon completion of the cleaning cycle the Verific screen, (see Figure 17b) will display, reapply the verific fluid to a new sample swab and perform the verification process again.

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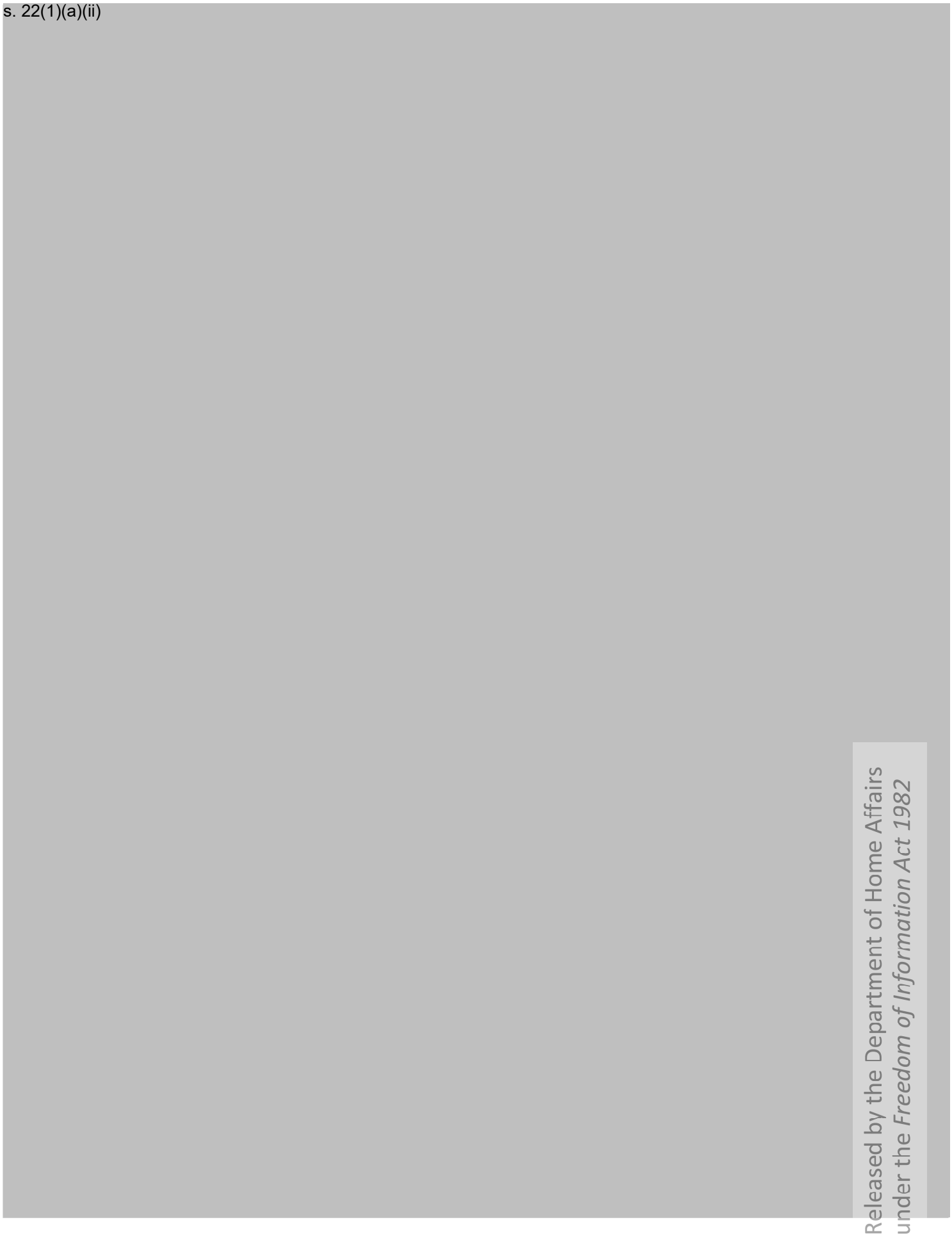

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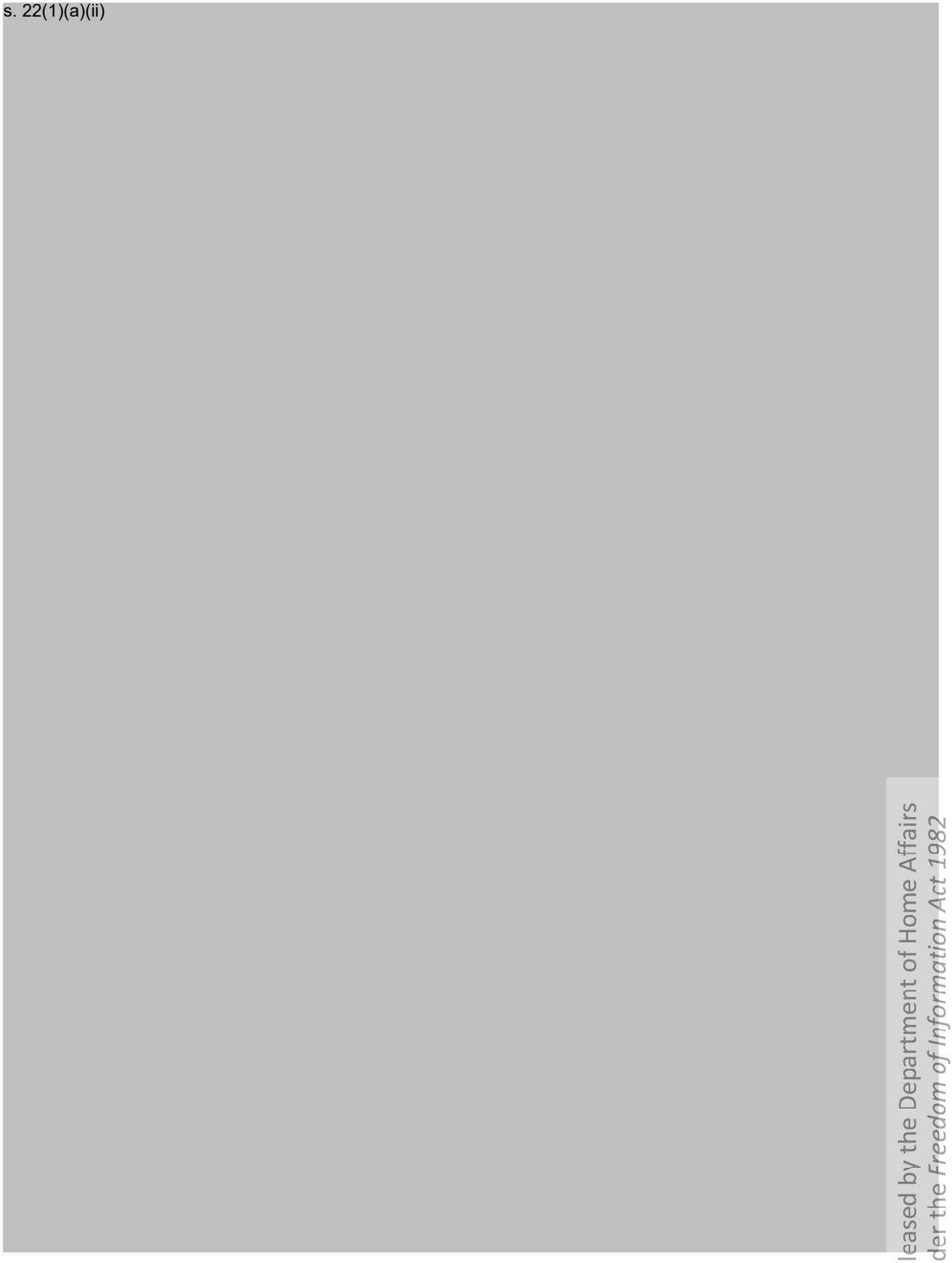

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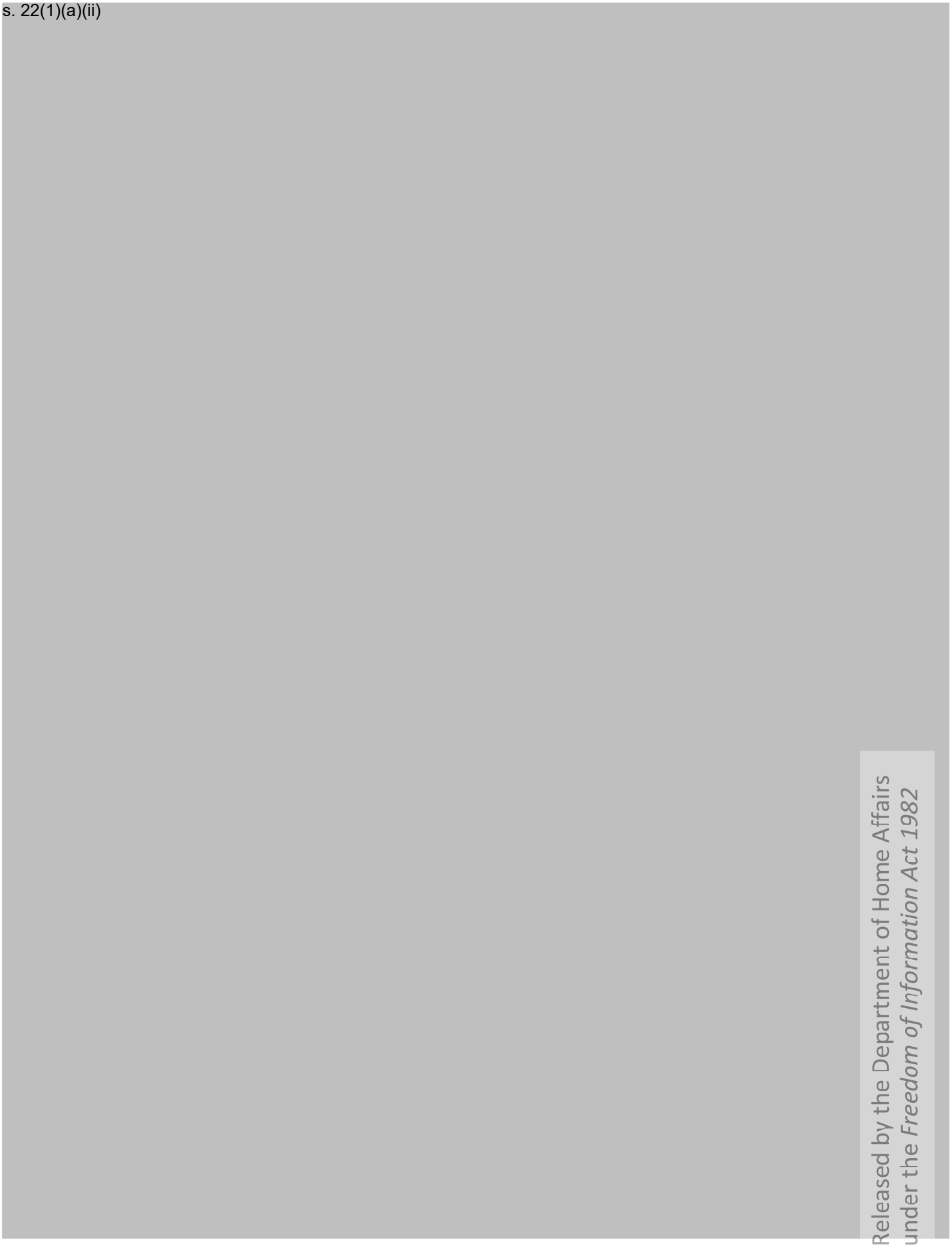

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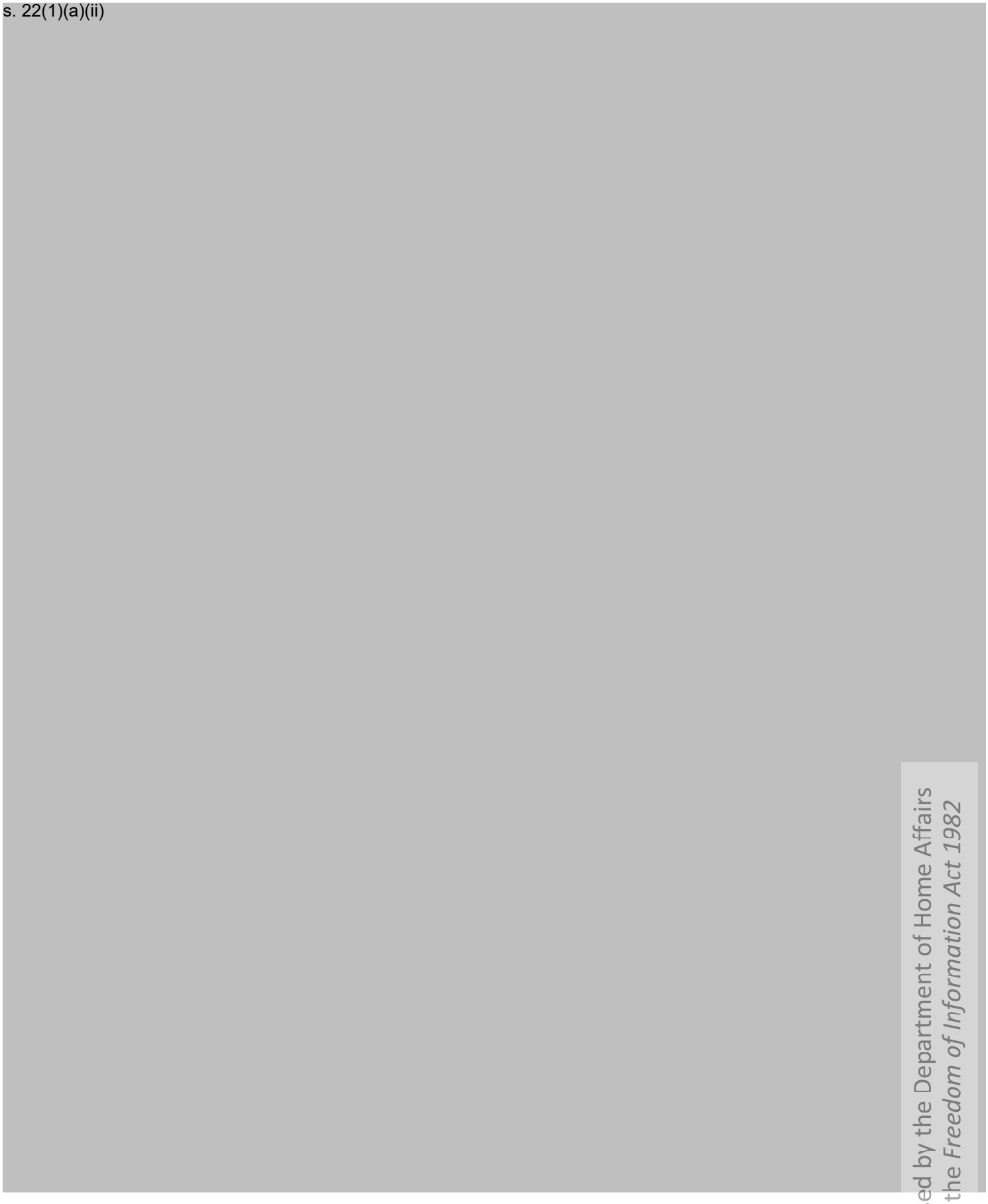

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39a. Particle Trace Detection (IONSCAN 600)

Document Details

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39a. Particle Trace Detection (IONSCAN 600)

Amendment Details

Version	Description	Issue Date
v1.0	Initial Version	23/08/2018
v1.1	Minor wording changes	10/08/2018
v1.2	IFS changed to J&I in Reference Number	02/11/2018
v1.3	Various changes, process, images, order of content	21/01/2019

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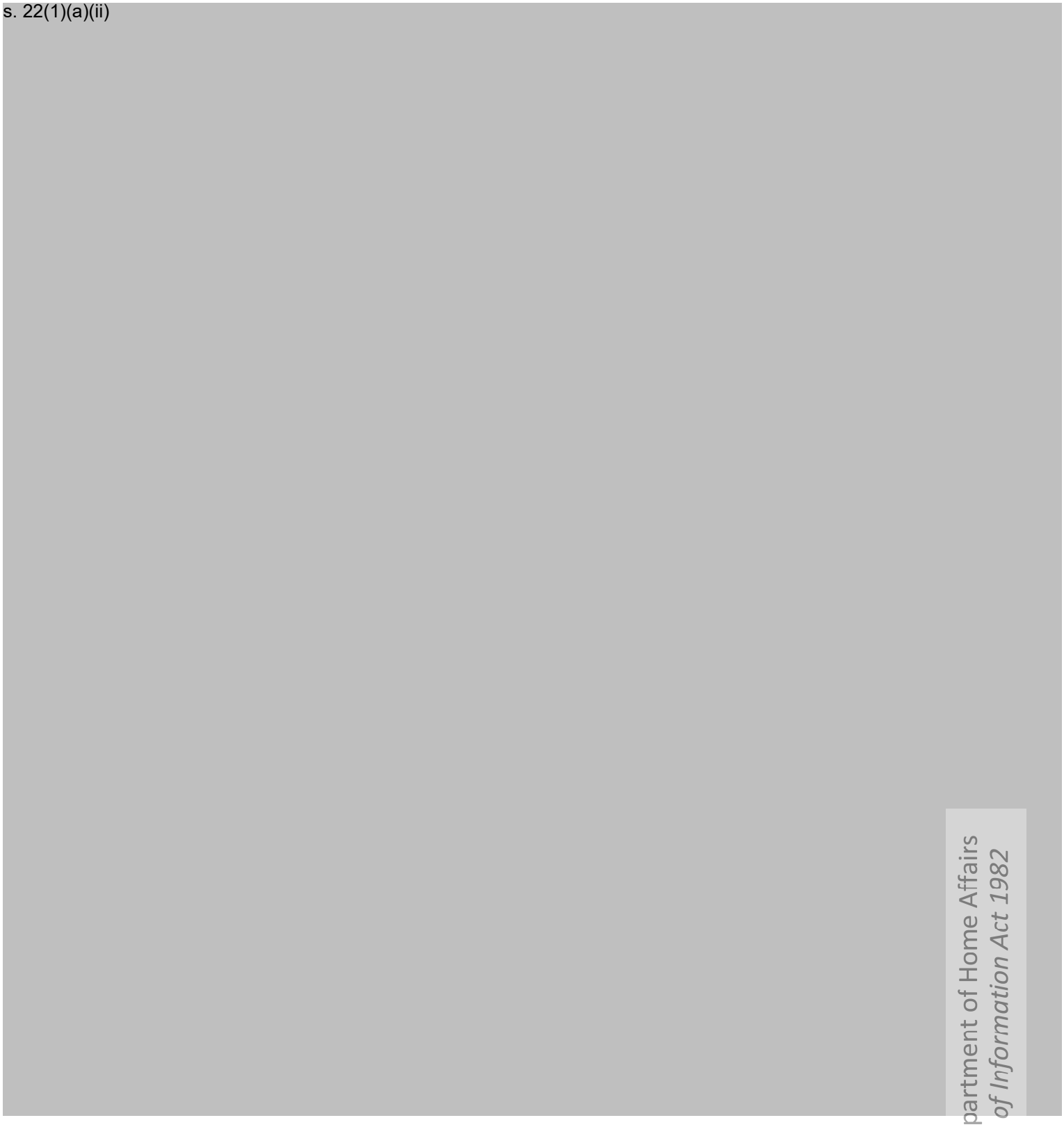

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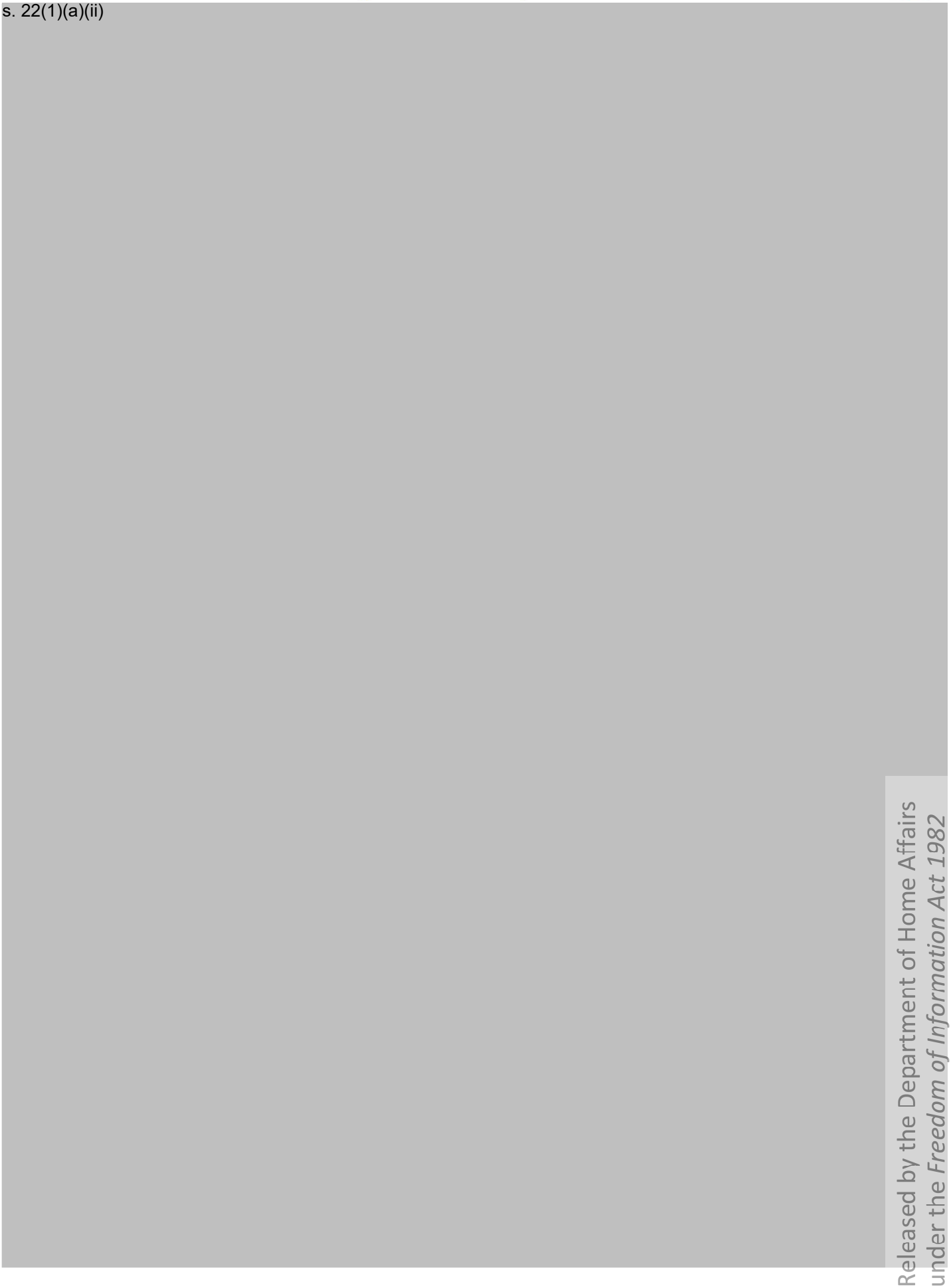

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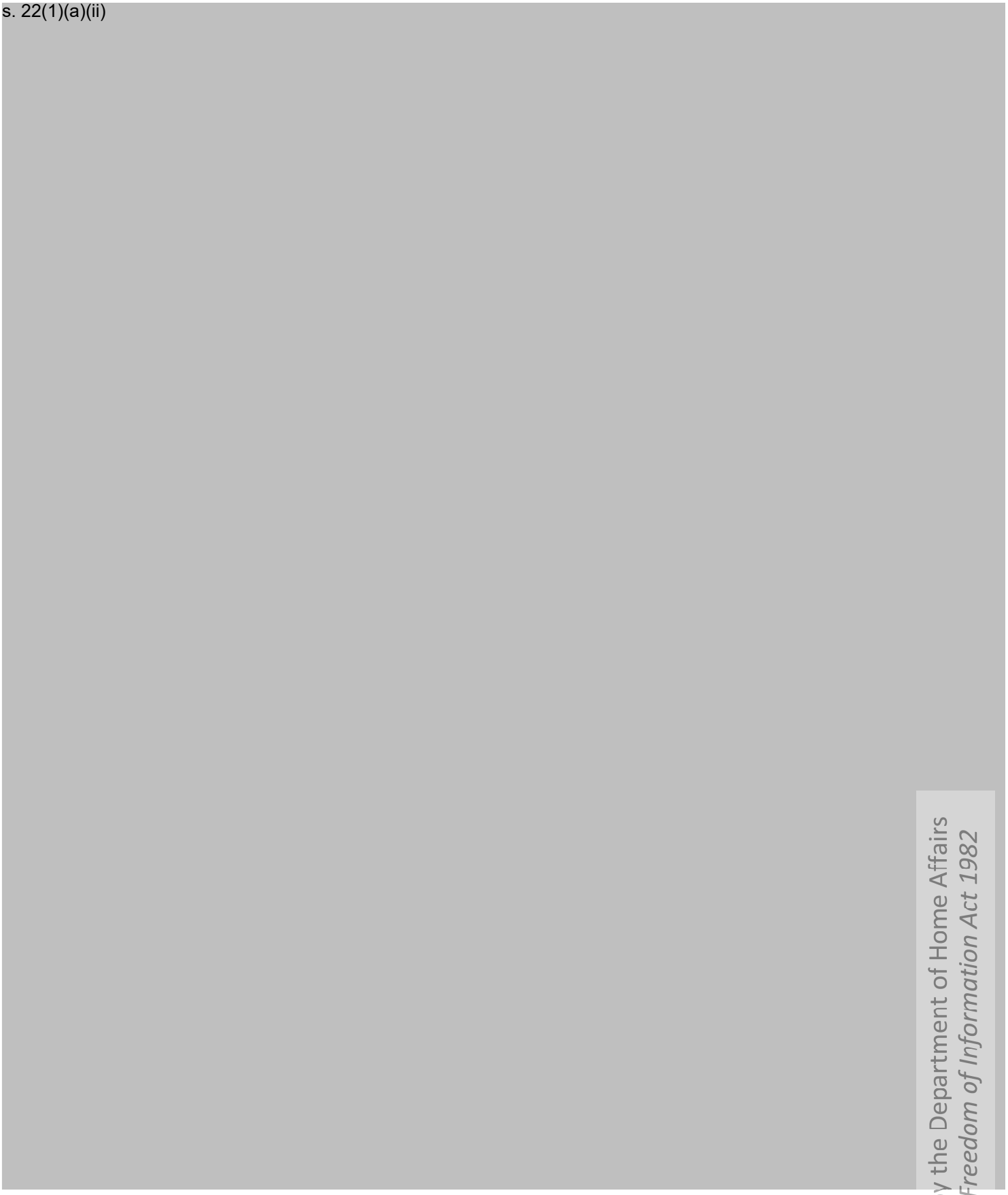

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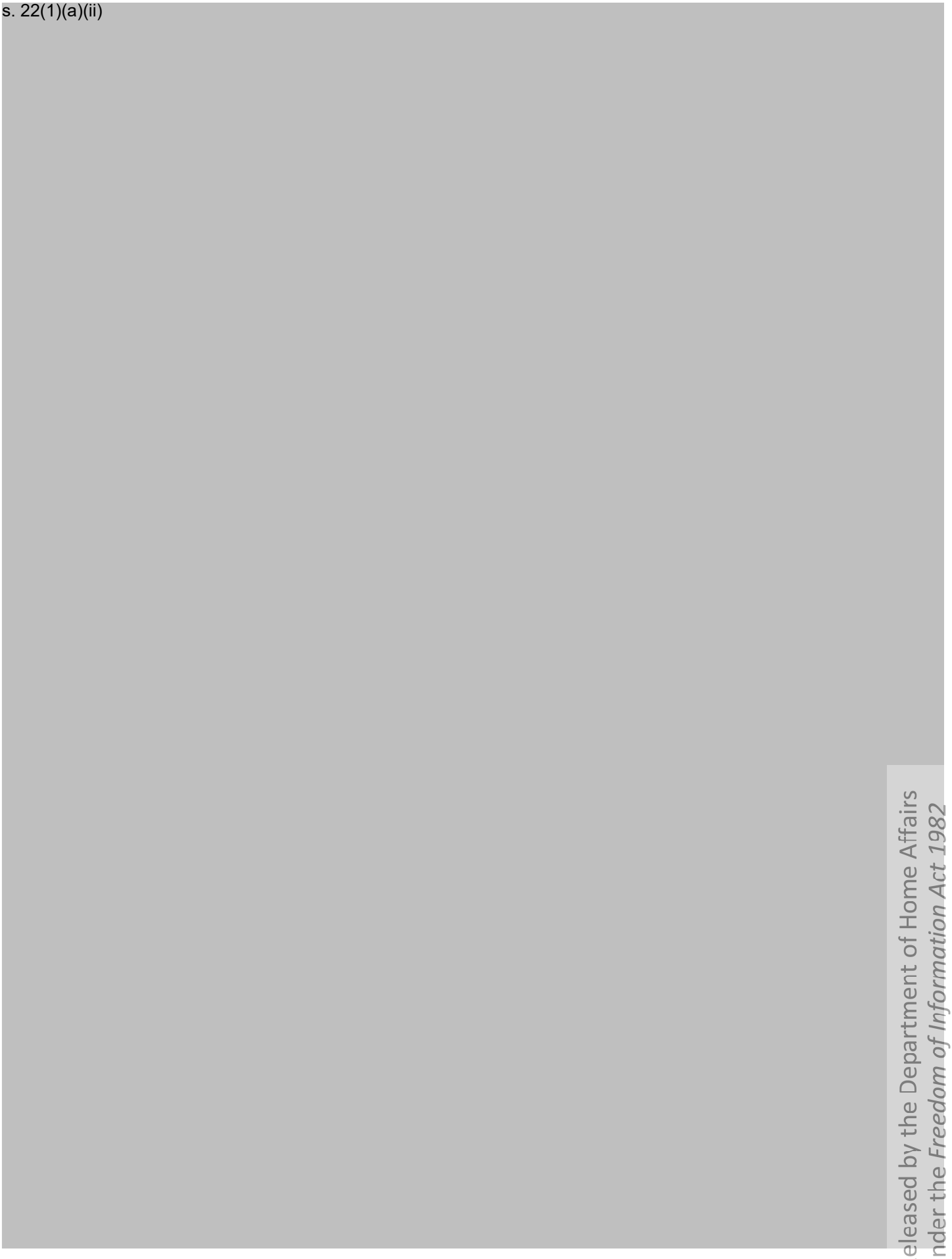

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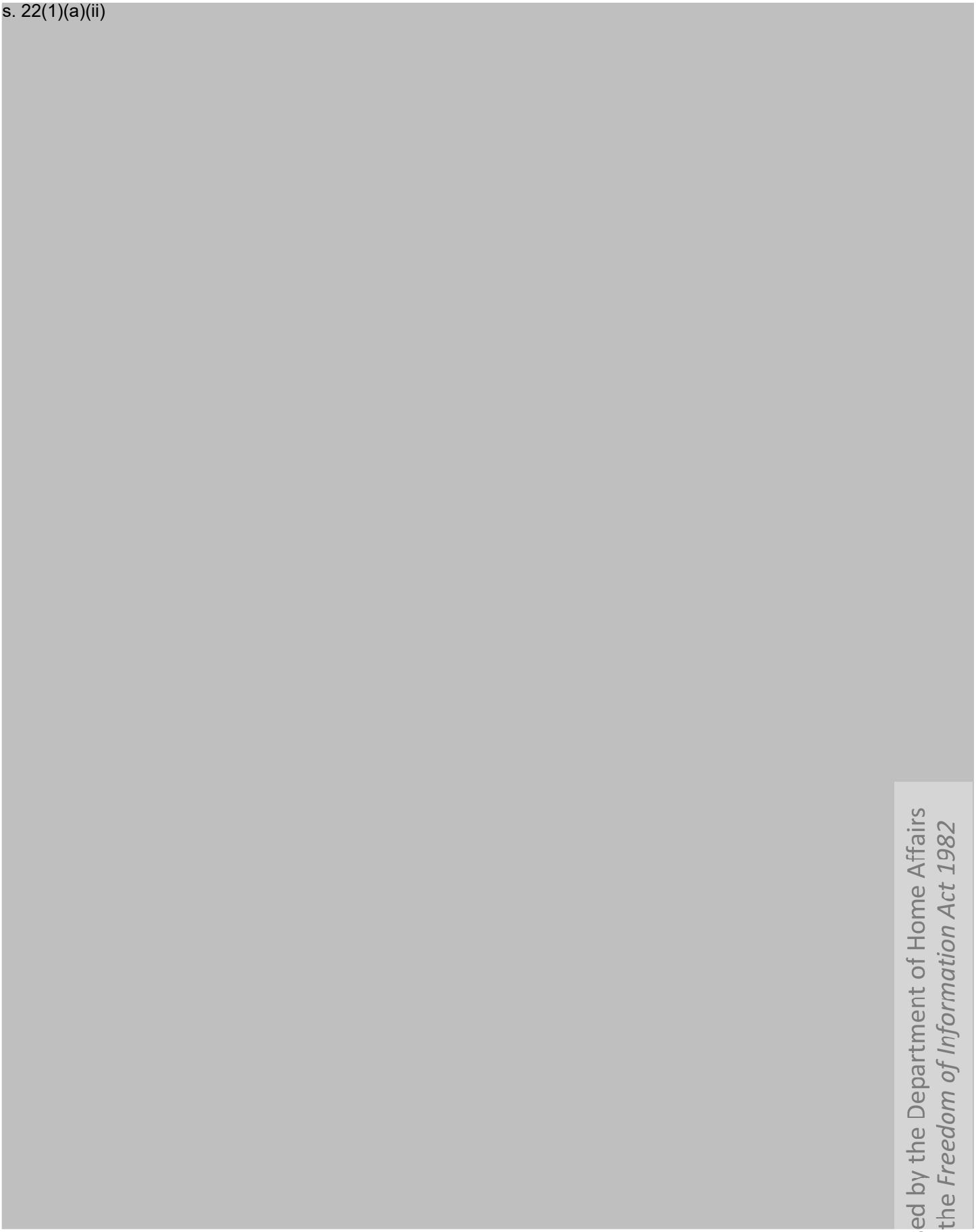

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8. Verification (Verific)

Verification is required every 8 hours and the unit will prompt the user, do not bypass the prompt. It is also recommended a manual verific be performed prior to the start of every Officers shift, to ensure the unit is working properly. If a verification has recently been performed, the initial screen prompts the user to start an Analysis.

If a verification is scheduled and not performed or the unit has been shutdown, a verification will be required at restart. The initial screen will prompt the user to perform a Verification.

8.1 Priming the Verification Pen

Any new "Verification Pen" needs to be primed at the commencement of first use. This will allow the fluid to be absorbed into the tip of the pen and then used for further verifications. Officer performing the verification then apply a small amount of the "Verific Fluid" to a "Swab" to conduct the test.

To prime the pen:

- Firstly, shake the pen for a few seconds to combine the liquid;
- Remove cap from the pen;
- Press and release the tip of the pen 1 – 3 times against the indent in the back of the pen cap, only done for a new pen, first use, (see Figure 16);
- Stopping as soon as the tip is visibly wet, Verifc fluid should bleed visibly when applied if it does not, prime the tip again;
- Immediately recap the pen to prevent it from drying out;
- If the verification standard dries out after its first priming, re-prime the pen using the same method.

* **Note**: Ensure that when placing the pen lid back on that it "Clicks" into place. This will ensure that the pen doesn't dry out and the liquid doesn't leak. The pen is to be kept out of direct sunlight and away from heat.

Figure 16 – Priming the "Verification Pen".

8.2 Sample Swab

Samples are to be taken using the specifically designed "Wand". Ensure that only the Smiths supplied sampling swabs are used with the IONSCAN 600, (see Figure 17).

The sample swab is designed with an alignment hole on the "Right" side of the swab, to ensure proper sample introduction, (sample side facing towards the front of the unit). The swab is used for both performing a verification and taking a sample during operational use.

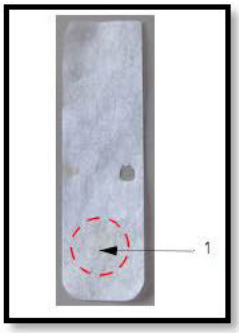

Figure 17 – (1.) "Sampling" area on the swab.

8.3 Performing a Manual Verification

When running a verification ensure the IONSCAN 600, sample swab, work area and the user do not become contaminated. Do not rest the swab on any surface when applying the verification fluid. Failure to follow this instruction may result in the surface of the swab becoming contaminated, resulting in an incorrect analysis.

To perform a verification:

- From the "Home" menu, touch the "Verific" icon (see Figure 18a);
- The screen will now ask for a swab to be inserted (see Figure 18b);
- Wearing clean approved "Screening" gloves, hold out a new swab;
- Remove the verification pen cap and lightly apply a small amount of the verification fluid, no more than a dot, to the "Sample Area" of the swab (see Figure 17);
- Hold the swab in the air while and allow time for the verification fluid to completely dry, (approx. 10sec);
- Insert the end of the swab with the rounded corners into the sampling inlet until it touches the bottom. Ensure that the alignment hole is on the "Right" side and the sampled area and is facing the front of the unit, (see Figure 19);
- Analysis will begin automatically; a progress screen displays while the analysis is running.

Figure 18a & 18b – "Verific" selected on the "Home" screen, "Verific" screen awaiting swab.

When the unit prompts the user to perform the verific, the screen will turn yellow, (see Figure 18c). The machine can still be used but the verific should be conducted asap.

Figure 198c – Unit prompted "Verific"

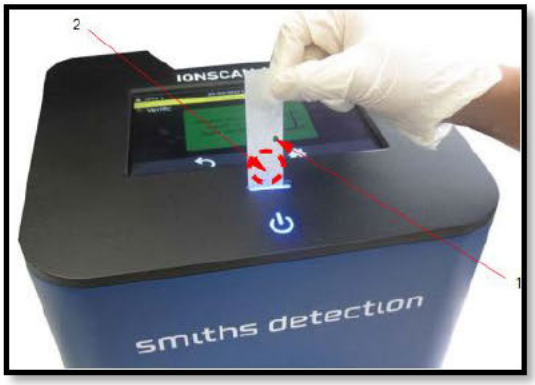

Figure 19a & 19b - 1. "Sample Area" on swab & swab inserted correctly, alignment hole (1.) to the right.

8.3.1 Successful Verification

Following a successful verification:

- Remove the swab as indicated on the Verific Successful screen, (see Figure 20a);
- Touch the message bar to acknowledge the verification, (see Figure 20b).
- Record the verific in the log ensuring the Sample I.D. is recorded with the entry.

An automatic clean process will start with the removal of a swab. If the alarm screen still displays, touch the screen on the message bar to acknowledge and clear the Verific notice. Once the Verific notice has been cleared, the "Main Menu" screen will open up again.

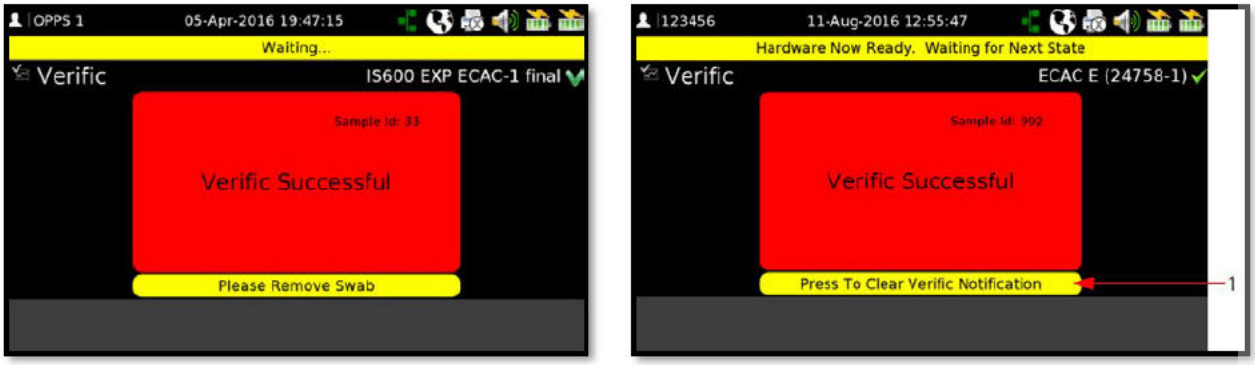

Figure 20a & 20b – Verific Successful remove swab, (1.) "Press To clear Verific Notification".

8.3.2 Unsuccessful Verification

If the verification process is unsuccessful, indicated by a "Verific Failed" yellow screen (see Figure 21). The verification process will need to be reattempted.

Figure 21 – (1.) "Press to Retry" verification process. Note: "Verific Not Found".

The most likely reason for a "Verific Unsuccessful" is there was no Verific fluid on the sample swab. Check that the pen is not spent or that the cap has not been left off. Remove the swab & a cleaning cycle will automatically run. Upon completion of the cleaning cycle the Verific screen, (see Figure 18c) will display, reapply the verific fluid to a new sample swab and perform the verification process again.

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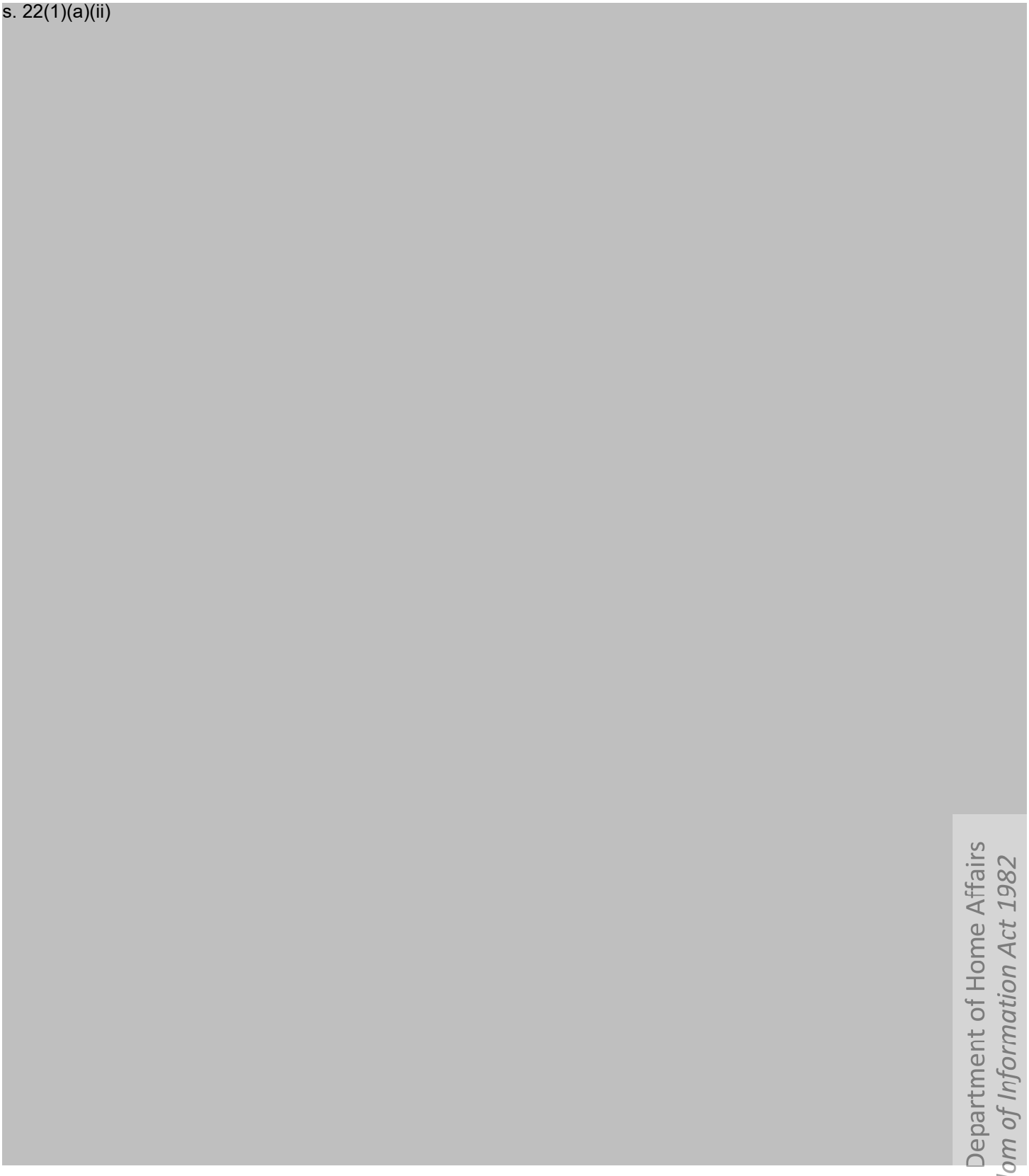

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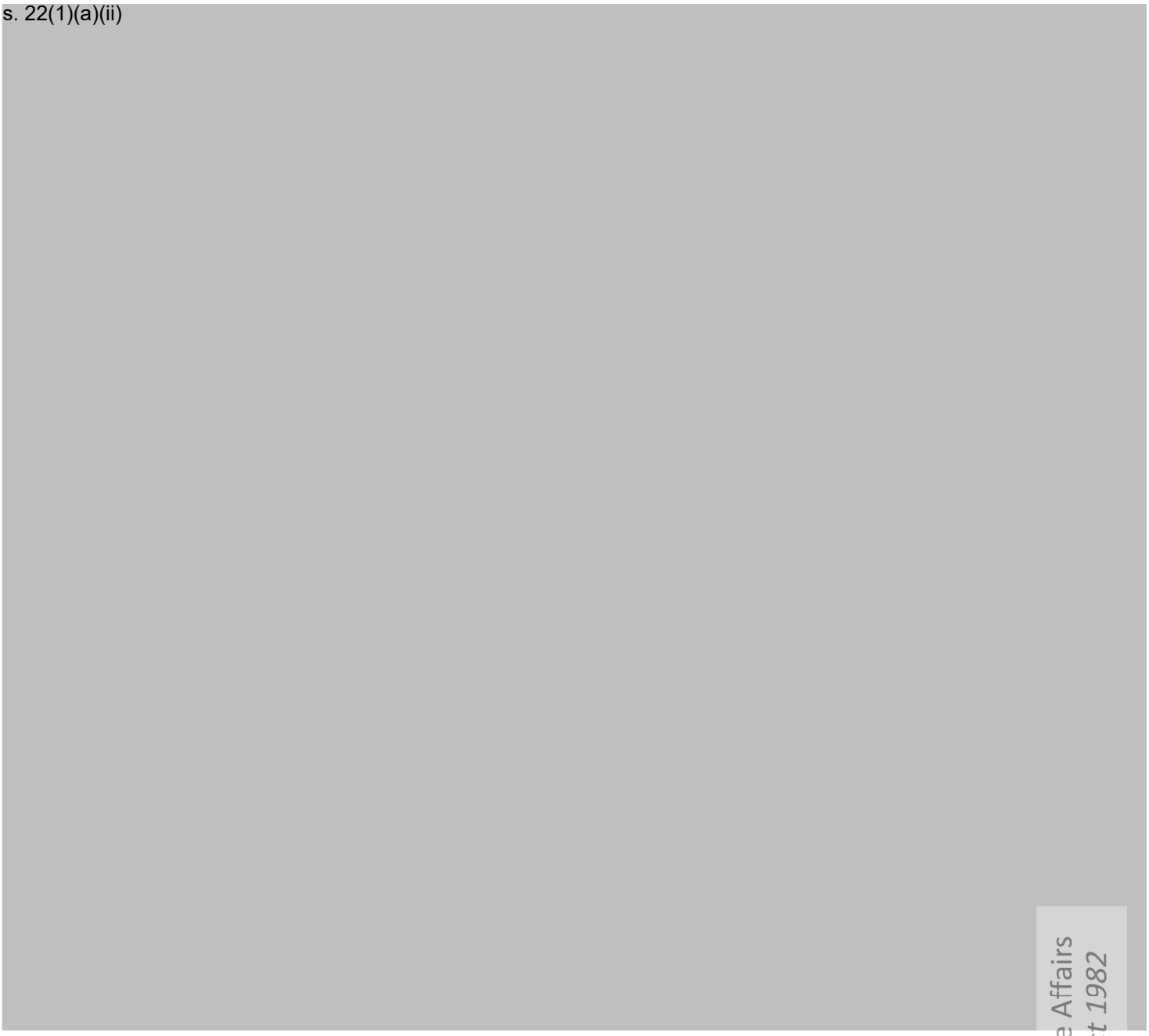

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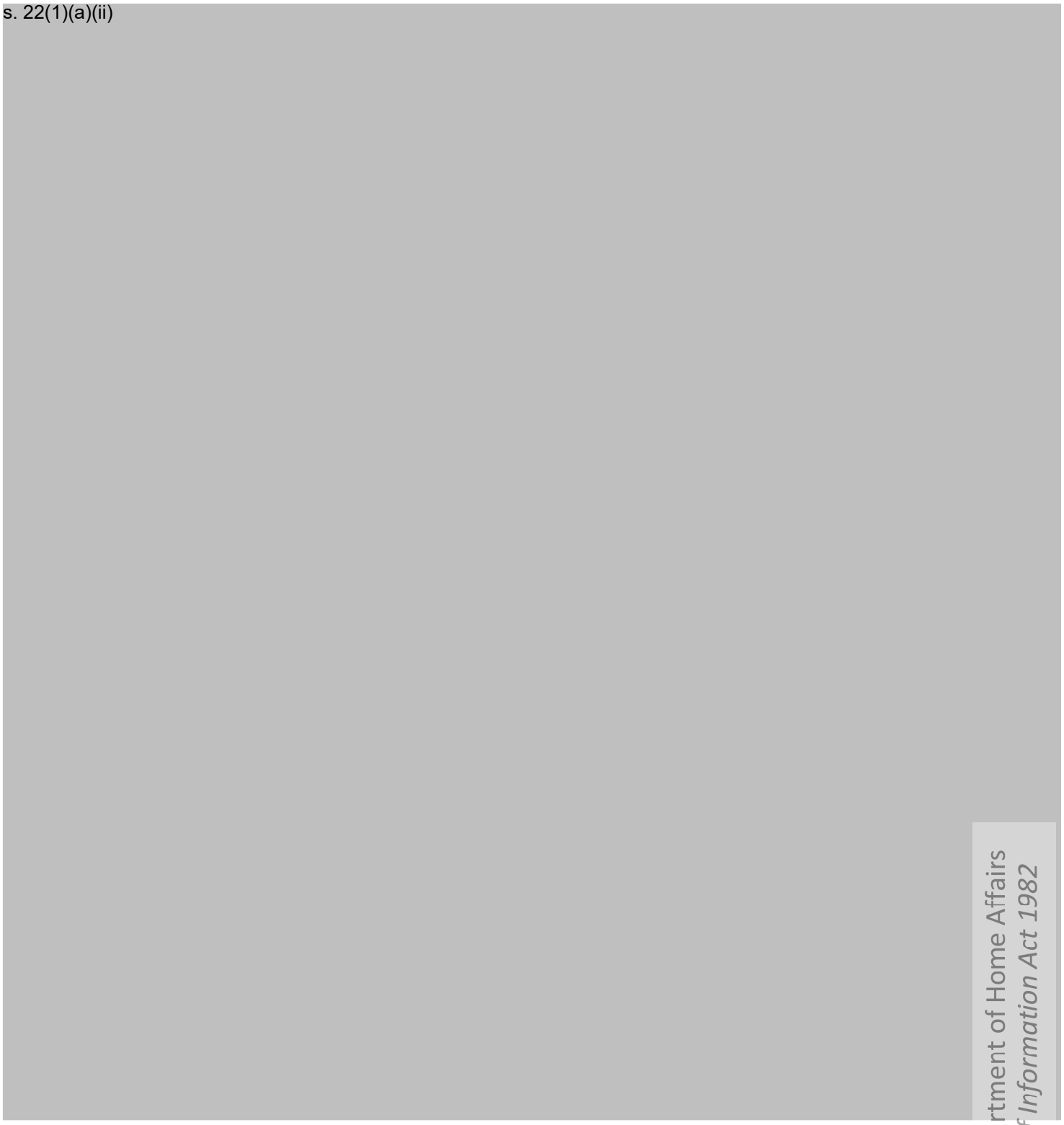

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Training Manual
39. Use Itemizers

Document Details

Document	Use Itemizers
Applies To	FDS Contract
Owner	J&I L&D Manager
Last Approved	08/12/2017
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Reference Number	IFS-L&D-MAN-0390
Version	3.0
Identification Number	
Date	08/12/2017

Amendment Details

Version	Description	Issue Date
v1.0	Initial Version	January 2015
v2.0	Rewrite and reformat to L&D Template	August 2015
v2.1	Not recorded	No date recorded
v3.0	Formatted into new template and layout, mapping checked against DSOPs	December 2017

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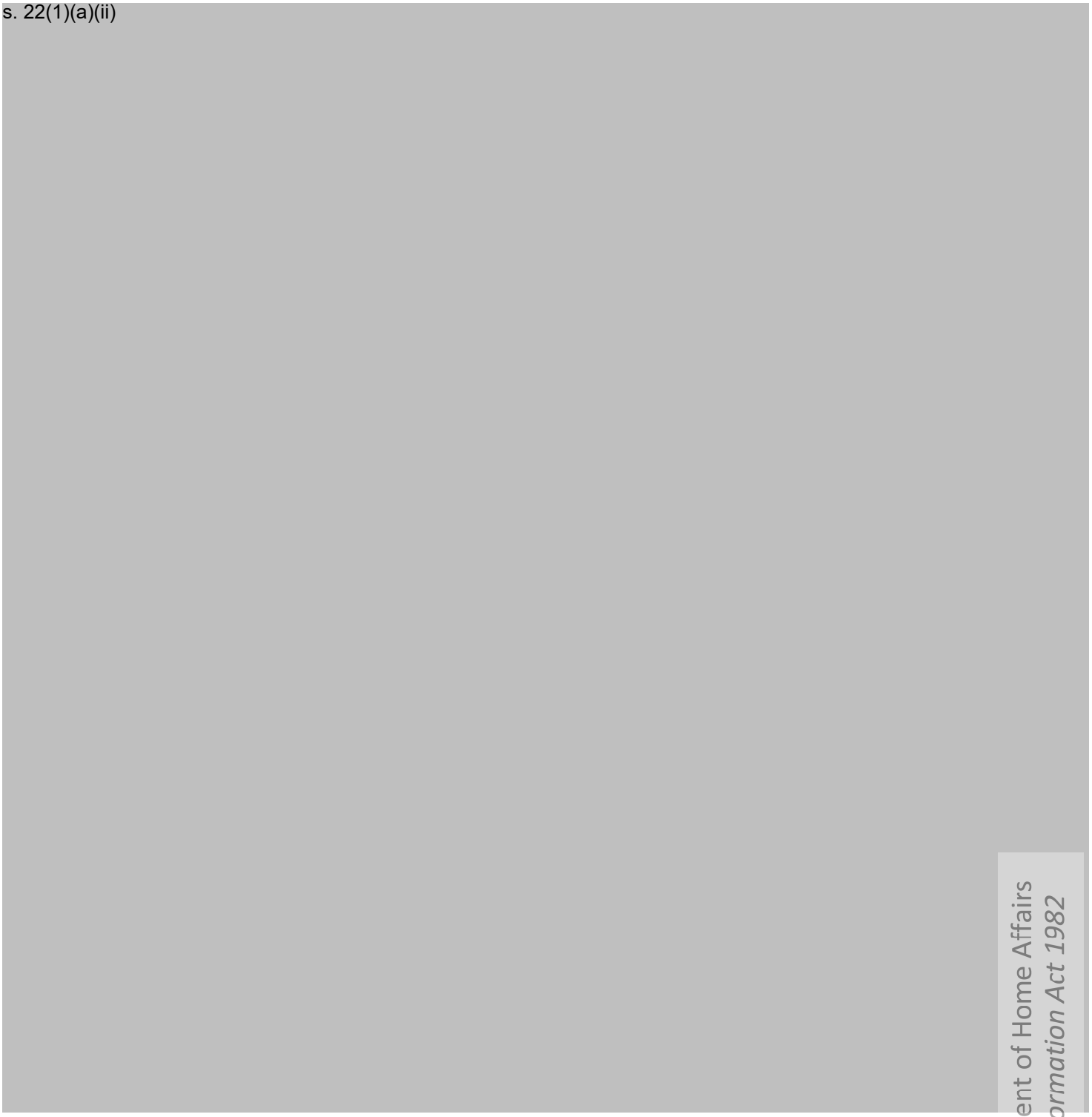

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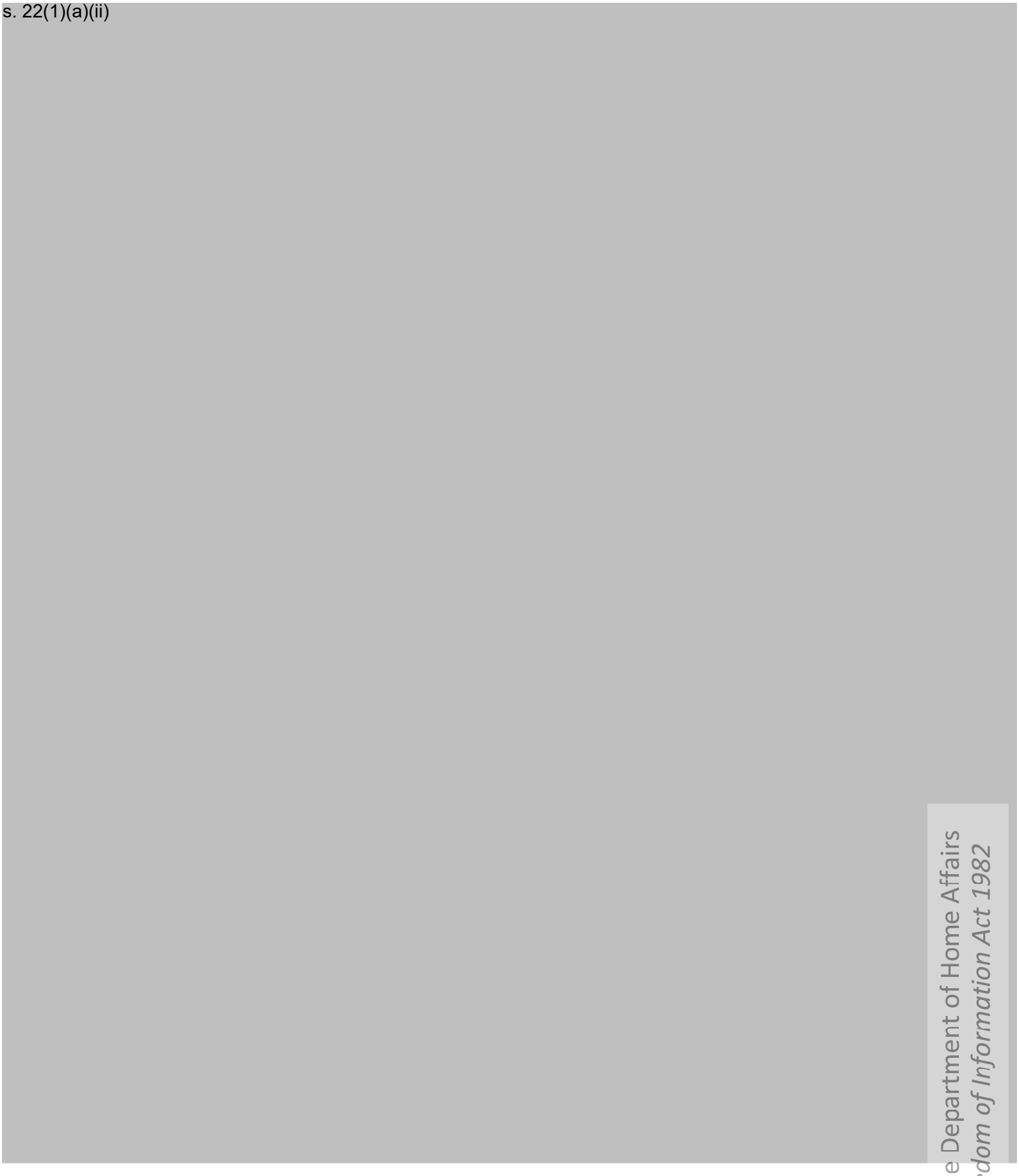

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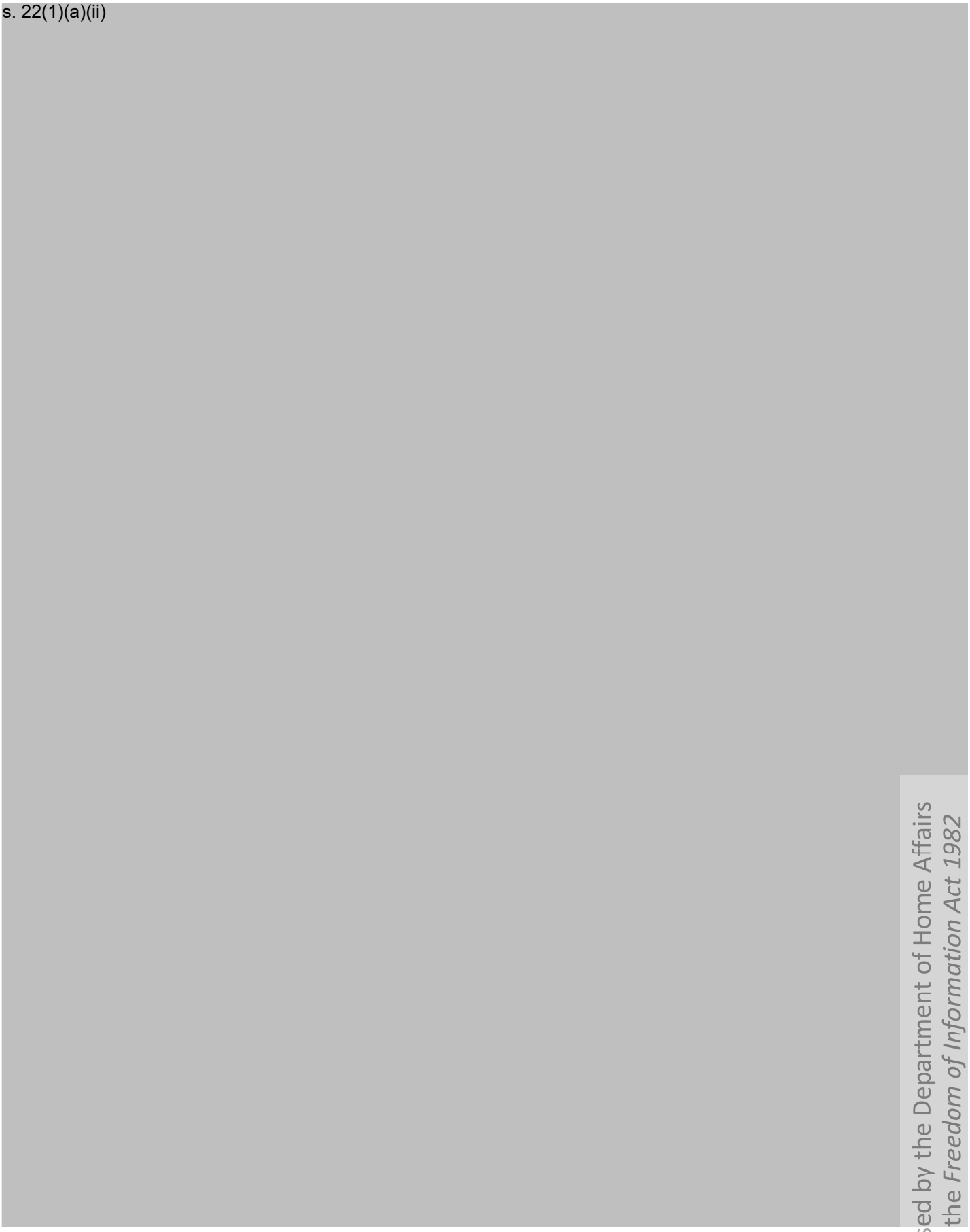

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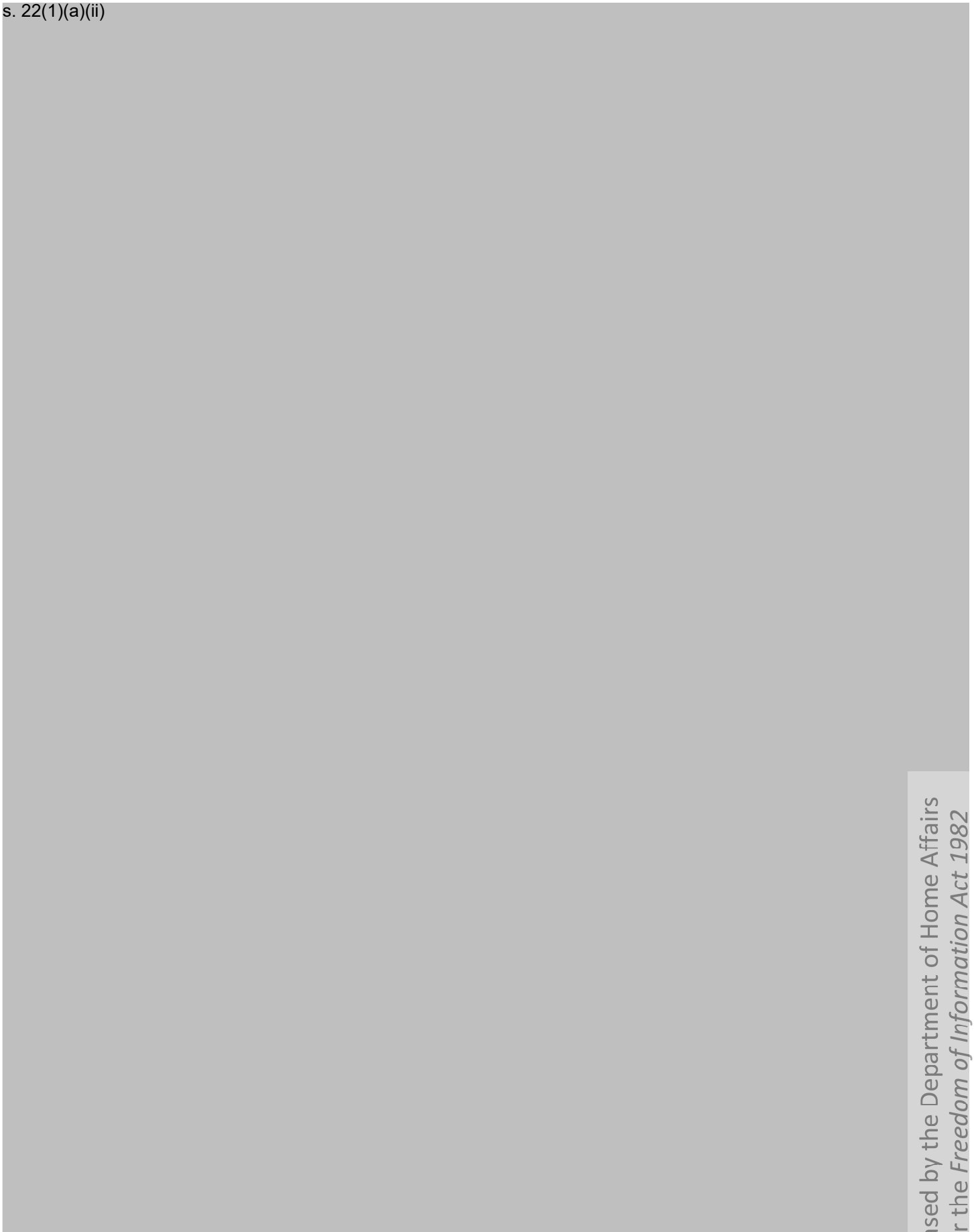

5.8 Calibration

After the Itemiser DX unit has warmed up and is ready for use, a "Calibration Warning" message will appear.

This message will also appear by default every eight (8) hours.

Whenever this message appears, the automatic calibration process must be performed. This must be done before any samples are analysed.

The reason for calibration is the systems ionization process is affected by moisture, temperature and pressure. The calibration process compensates for these environmental changes so that the system can accurately analyse samples.

To perform the automatic calibration process:

- Press the Menu Button on the Calibration Warning Screen;
- On the Menu Screen, press the Auto Calibrate button;
- Carefully remove a calibration trap from its container and insert into the Desorber slot;
- Calibration traps have a "C" punched out of them, at the top of the trap;
- Upon Receipt of the calibration trap, the system will automatically begin its analysis;
- When prompted by the system, remove the calibration trap and discard it. Calibration traps maybe used only once and
- If the calibration is successful, a "Calibration Successful, Clear will be performed" message will appear. Press OK clear the system of contaminates. This may take a while.

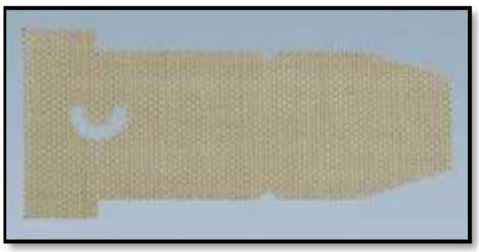

Figure 14 – Calibration Trap

If the calibration was unsuccessful, an error message will appear.

Press 'Retry' to repeat the automatic calibration process, using a new calibration trap. If the unit fails to calibrate after this second try, a manual calibration will be required.

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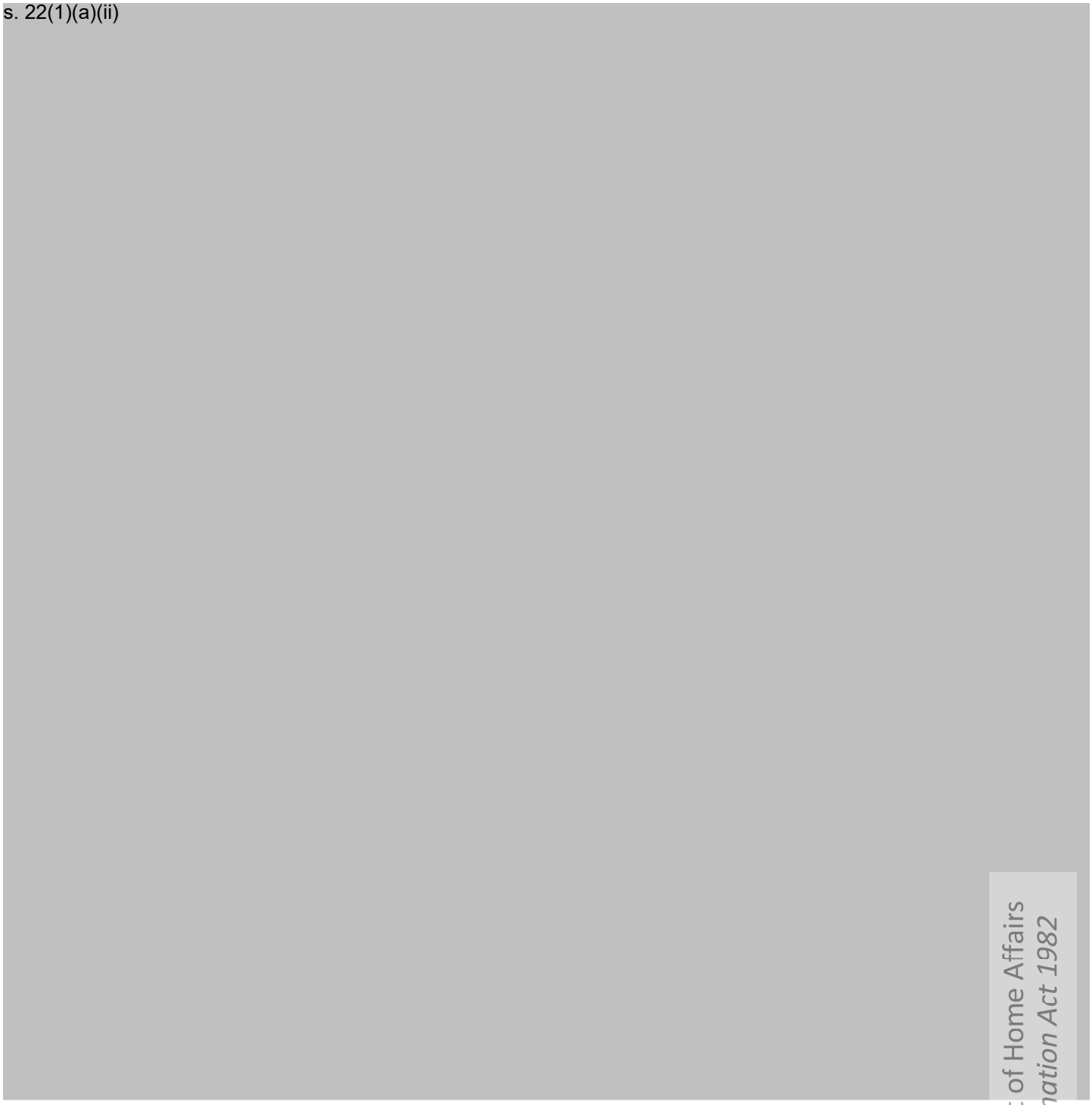

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