Port biosecurity facilities for the UK Overseas Territories

Technical specifications

The main facilities and equipment required for a port-of-entry (sea or air) biosecurity facility in the UK Overseas Territories are given below, together with estimates of cost.

Only specialised equipment is costed and estimates are not provided for items such as constructing buildings, converting existing buildings, laying down hard-standing, etc., fittings such as lights and sockets, and equipment such as torches and knives, as these are variable across the Overseas Territories.

Quotes provided are indicative and should not be taken as an endorsement of the company or brand; others are available. Costs are given in GBP (£ sterling) and are correct as at June / July 2020.

<table>
<thead>
<tr>
<th>Item</th>
<th>Specification</th>
<th>Costs</th>
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</table>
| Cargo inspection room (air or sea port) | Size depends on the amount of goods routinely requiring inspection. For example: an inspection room 7.5m x 6m will allow up to 6 inspectors working at 3 double inspection benches, each ca 1.5m x 0.5m, with benching at the sides to hold goods waiting to be inspected or just cleared. Facility to include:  
  - 1000 lux light above each double inspection bench  
  - Closed room  
  - Air conditioning  
  - No windows, or windows fitted with insect mesh  
  - Internal doors solid, with small glass window  
  - Sluice  
  - Hand basin  
  - Disposal bins with swing lids for biosecurity waste  
  - Sealed floor, uniform pale in colour with no pattern, easy cleaning with no joints or gaps in which invertebrates can take refuge | Cost depend on size and structure. Options include complete buildings, kit sheds and buildings, and shipping container conversions. A 20ft shipping container basic office model, with one window and door, costs around £9,000<sup>1</sup>. Fitting are extra, costs depend on specification. Brushed steel inspection benches from £700<sup>2</sup> UV light traps from £50<sup>3</sup> |

<sup>1</sup> [https://www.eldapoint.co.uk/](https://www.eldapoint.co.uk/)
<sup>2</sup> [https://www.equip4work.co.uk/](https://www.equip4work.co.uk/)
<sup>3</sup> Amazon.co.uk, various options
- Floor-wall junctions all sealed, with no gaps in which invertebrates can take refuge
- Inspection benches of brushed steel
- Open benching around side to hold boxes and containers awaiting or just completed inspection (note – this is not a storage area)
- Shelving to hold materials required for inspections and inspection room cleaning materials (note this is not a general storage area)
- UV light traps, sufficient number for the size of the room (two for an area 7.5m x 6m)

Depending on the area and SOP, the inspection room could be designed to allow shipping containers to be parked with doors opening into the inspection room.

### Additional areas

<table>
<thead>
<tr>
<th>Office area, sufficient size to take the necessary number of desks comfortably, with:</th>
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<tbody>
<tr>
<td>- Air conditioning</td>
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<tr>
<td>- Desk top and / or laptop computer</td>
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<tr>
<td>- Printer</td>
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<tr>
<td>- Internet connection</td>
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<tr>
<td>- Sufficient plugs and sockets for internet, computers, printers etc</td>
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<tr>
<td>- Shelving</td>
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Storage area with shelving for:

| Cleaning materials |
| Additional inspection and other materials |
| Lockable area to hold pesticide sprays |
| Office materials |

Closed holding area for goods being held pending decision or re-export:

| Shelving |
| Lockable |

Costs depend on size and structure.

The facility may be a single building divided into inspection, office and storage space.

Alternatively, additional kit sheds and buildings, or container conversions can be added to the inspection room in a modular fashion. Example: 20ft flat-pack portable site office costs from ca £8,000, without internal fittings[^4].

Pesticide storage cabinets from £250[^5]

New 10ft refrigerated shipping container from £13,500[^6]

Chest freezer from £400[^7]

Binocular microscope from £400[^8]

[^4]: https://www.eldapoint.co.uk/
[^5]: https://www.equip4work.co.uk/
[^6]: https://www.clevelandcontainers.co.uk/specialised-containers/refrigerated-containers
[^7]: Amazon.co.uk, various options
[^8]: https://education.scichem.com/
<table>
<thead>
<tr>
<th>Facility Type</th>
<th>Description</th>
<th>Cost Information</th>
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<tbody>
<tr>
<td>Freezer of at least 300l capacity (may go in</td>
<td>Laboratory, with:</td>
<td>Incubator from £700&lt;sup&gt;9&lt;/sup&gt;</td>
</tr>
</tbody>
</table>
| storage or holding area)                         | - Breeding cages for invertebrates  
- Benching and microscopes  
- Incubators  
- High temperature oven for sterilising materials  
- The main reference collection may be held here                                                                 | 10-drawer entomological cabinet from £1,600<sup>10</sup>                          |
|                                                  |                                                                                                                                                                                                            | Breeding cages can be made locally. Bought from £15 (30cm cube pop-up cage)<sup>11</sup> |
|                                                  |                                                                                                                                                                                                            |                                                                                  |
| Vehicle and machinery inspection facility        | - Area of hard-standing at least 4m x 6m size (sufficient for a single vehicle or machinery of standard to large size).  
- Sunken central drain fitted with a filter to collect debris and seeds; draining directly to the sea is ideal.  
- Hard-standing to be surrounded by weed-free barrier at least 5m in width.  
- Access to water and power for cleaning  
- Pressure cleaning equipment  
- Vacuum cleaning equipment  
- Location to be easily and safely accessible for vehicles, which then proceed out of the bonded area once cleared / cleaned | Costs depend on size and location.  
Local quotes should be sought on laying hard-standing and connecting power and water, if necessary.  
Pressure washer costs depend on power supply, cold or hot wash, and size required (amount of use anticipated). From £600<sup>12</sup>  
Vacuum cleaning equipment depends on size and anticipated level of use. From £500<sup>13</sup> |
| Shipping container inspection facility           | - Concrete stands at a height to allow an inspector to comfortably stand below the parked container, allowing safe inspection of the underside of a container.  
- Scaffold gantry to the side, allowing safe inspection of the top surface of a shipping containers  
- Location to be easily and safely accessible for containers, which then proceed out of the bonded area or into stacks once cleared / cleaned | Costs depend on size and specification.  
Local quotes should be sought on laying hard-standing and building a gantry.                                                   |
| Detector dog facility                            | Kennels, equipped with necessary feeding, cleaning and handling equipment                                                                                                                                   | Cost depends on requirements: size, number, location (indoors or                  |

<sup>9</sup> [https://education.scichem.com/](https://education.scichem.com/)  
<sup>10</sup> [https://www.watdon.co.uk/](https://www.watdon.co.uk/)  
<sup>11</sup> [https://www.watdon.co.uk/](https://www.watdon.co.uk/)  
<sup>12</sup> [https://www.acpressurewashers.co.uk/](https://www.acpressurewashers.co.uk/)  
<sup>13</sup> [https://www.equip4work.co.uk/](https://www.equip4work.co.uk/)
| Holding area at air and sea ports (lockable, suitable temperature, away from public, bowls, water) | outoors, with or without run). Advice from a local veterinarian should be sought for the appropriate equipment for the location. Modular kennels and pens can be bought. Example: modular mesh pen, 3m x 2m x 1.84m tall, from £700[^14]  
Crates, for vehicles and as holding pens, from £700[^15] |
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<tr>
<td>Harness and long lead for work</td>
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**Detector dogs**

Professionally trained detector dog, to detect up to three scents.

The bio-security dog can detect numerous scents. Once a dog is trained on 1 or 2 scents in a group it will then reliably pick up on other associated scents. Dogs can be trained to detect meat, seeds, live plants, fruit and products of animal origin. If a dog is trained to detect these scents, by association this can extend the list of detectable items in to the hundreds. The list of scents required would depend on where the dog team was to be deployed and the requirements of the customer.

Professional detector dog handler training.

Note that quoted costs do not include transport of dogs to the territory, or travel and accommodation for the dog handler training in the UK.

**Equipment for biosecurity inspections**

- Random search selector
- Binocular microscope and/or digital microscope
- Ziplock bags
- Specimen containers and 70% alcohol
- Bin bags
- Forceps, brushes etc
- Hand lens
- Light/lens fittings for inspection bench

Mains powered random search selectors from £250, battery powered from £80[^17]

Binocular microscope from £400[^18]

Digital microscope from £50[^19]

[^14]: https://dog-kennelsdirect.co.uk/
[^15]: https://www.transk9.com/
[^16]: https://www.wagtailuk.com/
[^17]: https://www.insight-security.com/
[^18]: https://education.scichem.com/
[^19]: Amazon.co.uk, various options
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<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Cost Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Torches</td>
<td>10-drawer entomological cabinet from £1,600&lt;sup&gt;20&lt;/sup&gt;</td>
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<td>Knives</td>
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<tr>
<td>Insecticidal sprays for knock-down of flying and crawling insects</td>
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<tr>
<td>Reference collection (preserved specimens and/or images)</td>
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<tr>
<td>Incinerator</td>
<td>Incinerator suited to a broad range of applications and waste types, able to cope with plant and animal material, and including medical waste. &lt;br&gt;Cheap to run and must meet local emissions standards. &lt;br&gt;May be fixed or portable.</td>
<td>Cost depends on burn rate and capacity:&lt;br&gt;1) Burn rate: up to 30kgs per hour / Capacity 0.18m³ - £6,800.00&lt;br&gt;2) Burn rate: up to 40kgs per hour / Capacity 0.36m³ - £8,400.00&lt;br&gt;3) Burn rate: up to 50kgs per hour / Capacity 0.75m³ - £9,900.00&lt;br&gt;4) Burn rate: up to 100kgs per hour / Capacity 1.35m³ - £16,000.00&lt;sup&gt;21&lt;/sup&gt;</td>
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</tbody>
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<sup>20</sup> [https://www.watdon.co.uk/](https://www.watdon.co.uk/)<br><sup>21</sup> [www.inciner8.co.uk](http://www.inciner8.co.uk)