



## Freedom of Information Request FOI 20 58

### Breathing apparatus

#### Query and response:

1. Can you please provide the current manufacture and model of the Breathing Apparatus (BA) set/s used within your Fire and Rescue Service (FRS)?

**Drager PSS 7000 with telemetry**

2. Does your FRS have Extended Duration Breathing Apparatus (EDBA)? EDBA is BA with a working duration of between 30 and 60 minutes (at 58 litres per minute air consumption rate).

**No**

3. What is the quoted cylinder capacity used within your FRS? Can you please give the water volume and full capacity when charged e.g. 6.8Litres (L) water volume, 1836L of air when charged to 300bar. If you have both SDBA and EDBA, please provide both cylinder capacities.

**9 litre water volume, 300 bar, 2454 litres of air**

4. Can you provide both the working duration and safety margin in minutes of the BA used within your FRS? If you have EDBA, please provide this too.

**36 minutes working duration, plus 12 minutes safety margin**

5. Could you please provide your FRS standard on the minimum cylinder pressure for entry into the risk area and minimum cylinder pressure for a re-entry?

**240 bar  
160 bar**

6. Can you please provide the pressure at which your Low Pressure Warning Whistle (LPWW) activates / sounds at? If the BA used within your service also has an electronic Low Pressure Warning Device (LPWD) can you provide this too.

**74 LPWW +/- 5 for pneumatic  
74 eLPWW**

7. Could you please provide a copy of the BA duration table as found on your Entry Control Boards used within your FRS?

**Each board has a sticker attached as below for manual calculations should there be a problem with telemetry:**

<b>WORKING DURATION</b>
<b>BASED ON 74 BAR WHISTLE SETTING AT 50 L/MIN BREATHING RATE</b>
<b>9 Litre 300 Bar</b>



Pressure Bar	2430 Litres
	Minutes
300	36
290	35
280	33
270	32
260	30
250	28
240	27
Re-entry duration	
160	15
Hard work will reduce duration	

8. Can you please detail your services Standard Operating Procedure (SOP) for Emergency Air Supply Equipment (EASE) arrangements?

### Emergency Exchange of Air Procedures

- If possible the team are to find a place of safety for the exchange of air procedure to be carried out.
- The BA wearer requiring air (Recipient) must gain the attention of another team member (Donor) indicating that they are in need of air.
- The Donor will confirm with the recipient that they have sufficient air to allow the procedure to be carried out.
- The Donor is to make their second person attachment available and remove the blank cap.
- The Recipient will need to take a deep breath and between the team disconnect the LDV air supply hose from the quick release coupling and connect it into the second person attachment.
- The Recipient must consider purging the LDV once connected due to potential exposure to air borne contaminants.
- Care must be taken not to put excessive strain on the hose and couplings and with some designs it may be possible to reduce this by the team linking arms, extending the hose from its mountings or connecting a karabiner to a safe point on the BA set from the EASE.
- The Donor contacts the ECO and states the following information:
  - BA Emergency
  - Exchange of air has taken place
  - Donor name
  - Recipient name
  - Donor's pressure and time to whistle
  - The teams current location
  - Whether they are exiting the risk area if close by or adopting entrapped procedure
- On telemetry enabled BA sets the new calculated Time Of Whistle will be automatically calculated and this should be recorded in the remarks column
- For non-telemetry enabled units, the remaining air for the Donor wearer must be recalculated at 100 lpm by halving their remaining time to whistle (TTW)



9. Do you have telemetry for the monitoring of BA wearers within your FRS?

**Yes**

10. Do you have long duration BA within your FRS? Long Duration BA has a working duration of over 60 minutes. If you answer yes, please could you provide the manufacture and model of long duration BA set used within your FRS. Could you also state the working and safety margin duration.

**No**

**Information/Detail accurate on the date provided: 05, August 2020**