

**In the period leading up to the freeze and thaw, can you please explain in more detail how your Executive and, where appropriate, your Board:**

**Question 1: Were involved in any planning or preparation, or approved any planning and preparation, for exceptional winter weather events. Please also detail when this occurred.**

- Our Executive was involved in planning and preparation for exceptional weather events in the period leading up to the freeze and thaw in two main ways:
  - a. Our Executive has been actively engaged with the review and development of our incident preparedness (within the broader framework of our Strategic Incident Management Response Plan (SIMRP)), which is regarded internally to be a combination of routine preparation and managed responses to specific threats or hazards. These arrangements underpinned our planning and preparations in the period leading up to the freeze and thaw.
  - b. Members of our Executive were directly involved in some of the preparations that took place in the period leading up to the incident, and in the escalation processes that resulted.
- Further details on the involvement of our Executive in preparations in these two ways are provided below. As noted below, our Non-Executive Board members were kept updated with work reviewing and developing our incident preparedness. Our Non-Executive Board members were not directly involved in the preparations that took place in the period leading up to the incident.

#### **Reviewing and developing our incident preparedness**

- Over the last 2 years we have followed a structured agenda of reviewing and developing our incident preparedness plans with our Executive Team. As part of this a number of papers have been presented to them, including a plan to improve our overall Security and Resilience, a number of annual updates on progress, a run-through of the Strategic Incident Management Room set up in January 2017 and updates on related improvement projects in August 2017. Update papers were presented to the Board in the November of both 2016 and 2017.
- In addition, our Executive has requested a number of formal internal audits as part of the annual planning process, including on Business Continuity (July 2016), Disaster Recovery and Resilience to Critical Systems (August 2017), Incident Response (November 2017) and Supply Interruptions: Prevention & Response (January 2018). The findings of these audits were reported to the Executive upon completion and ongoing actions tracked by Internal Audit, with a summary of progress then reported to the Executive on a monthly basis.

- In the autumn of 2016 a new structured approach to winter preparedness was implemented. It was managed at an operational level and, in addition, our Executive requested second line assurance and were provided with regular progress reports. A similar process was followed through 2017 but the formal second line assurance reporting was no longer considered necessary.
- Through the autumn of 2017 our Executive was kept updated on winter preparations and provided strategic governance where required. A briefing in October made the Executive formally aware that winter planning was underway. An action recorded at the Executive weekly operational meeting on the 7 November 2017 required the Water Resources Manager to present an update on the winter readiness plans on the 20 November 2017. Records show that this was completed to our required and expected standards outside of the formal Executive meetings.
- Also in 2017, Martin Kane, Chief Engineer, was asked by Liv Garfield to review our operational winter plans. The plans were developed and implemented at the Tactical and Operational levels and were signed off by Martin Kane in November 2017, who then provided a verbal update to the Executive later that month with their subsequent full endorsement. This activity was referred to in paragraph 21 of our original freeze / thaw review submission.
- The internal standard is for all of our Executive Team to complete Strategic Incident Manager Level training. As an example of this, James Jesic was appointed as the Director of Production in October 2017, and undertook Strategic Incident Management training on 15 November 2017, ahead of formally commencing in post on 1 December 2017. All members of our Executive have been trained to Strategic level and this is put into practice by their hands on involvement in any incidents that require escalation to their level.

#### **Direct involvement of Executive members in the period leading up to the incident**

- Sarah Bentley (our Chief Customer Officer) is the member of our Executive responsible for our field-based operations (that look after our distribution network) and contact centres. As part of this role, Sarah was directly involved both in implementation of our usual winter preparedness plans (in the months ahead of the freeze/thaw period), and the specific preparations that we made for the thaw ahead of the incident.
- James Jesic (Managing Director for Production) is our Executive responsible for all our above ground asset base, including treatment works, treated water reservoirs and booster stations. As part of the role, James was directly involved in the implementation of preparedness of our winter plans and specific preparations relating to our water treatment works and treated water reservoirs ahead of this event.
- Sarah and James were in regular contact with their operational leadership teams to understand, challenge and support their preparation, and were updated by relevant on-call Strategic and Business Leads ahead of a strategic incident being declared.

- Sarah kept our Incident Tracker app under regular review, and the level and frequency of communication with operational teams stepped up on Friday 2 and Saturday 3 March 2018, with regular calls made throughout the weekend. On Sunday 4 March 2018, as it became likely that further incident escalation was required, Sarah contacted James Jesic – our Managing Director for Production and Liv Garfield, Chief Executive Officer, both members of our Executive - and agreed an arrangement to dual command the incident in 12 hour shifts from 7am to 7pm should the need arrive between James Jesic and Sarah Bentley. The incident was escalated to strategic level on Sunday 4 March, and James took the initial night shift. Further details on the involvement of our Executive are provided in responses to other questions below.
- The Non-Executive Board members were kept fully up to date both prior to and during the event. Liv Garfield informed the Chairman of our contingency plans on Friday 2 March 2018. Subsequently, on Sunday 4 March 2018 she informed the Chairman and the other Non-Executive Board members of incident escalation to Strategic level.

**Question 2: Were notified of each applicable weather status update (amber alert, red alert) and the earliest point at which this occurred.**

**Question 3: Were involved in any planning or preparation in advance of the freeze and thaw event, following the amber or red alert notification. Please exclude any “business as usual” winter preparedness planning, unless the planning specifically considered the freeze and thaw event.**

- We have combined the answers to questions 2) and 3) in order to provide a clearer response.
- Our incident management procedures set out numerous incident triggers, how these should be escalated through our management structure up to, and including, the role of our Executive. Our incident trigger for severe cold weather is temperature and duration based, as opposed to being directly linked to weather status updates (e.g. yellow, amber and red alerts).
- As the weather deteriorated and the threat of a prolonged period of freezing weather along with heavy snow fall increased during the week commencing Monday 26 February 2018 our Executive were involved in several key preparatory decisions:
  - A number of decisions were taken in accordance with our incident manuals to ensure optimal production and resource availability. The magnitude of these decisions required Executive engagement, consultation and approval. For example:

- On Friday 23 February 2018, a decision to cancel 'development days' for members of the Network Control team for two weeks was taken. The cancellation of the training was agreed by James Jesic.
  - On Monday 26 February 2018, a decision to cancel the Strategic Company-wide incident training exercise (Operation Eaglemount) was taken. This exercise had been scheduled to include key members of the Executive as well as several of our Senior Management Team. The cancellation of this event was agreed by the Chief Engineer, and notified to the Executive Team.
  - On Tuesday 27 February 2018, an expanded incident rota was prepared to support a potential 24/7 incident requirement with sign off from Sarah Bentley.
  - On Wednesday 28 February 2018, a decision to defer a key part of the Birmingham Resilience Programme was taken in order to minimise potential disruption to our network. The cancellation of this event was agreed by James Jesic.
  - On Friday 2 March 2018, a decision was taken to set up daily operational conference calls to discuss people and wider resourcing with the awareness and support of James Jesic and Sarah Bentley.
- The Executive Team were increasingly involved in meetings and communications relating to our preparedness for a freeze/thaw incident. During this week, Sarah Bentley and James Jesic in particular worked very closely with their teams to understand, challenge and support preparation, given their roles as Strategic Commander in the event of the incident escalating to their level. Both received regular updates from their relevant teams.
  - Examples of increased involvement of the Executive Team include:
    - Tuesday 27 February 2018:
      - Both Sarah Bentley and James Jesic attended their respective weekly operational meetings, during which relevant preparations were discussed and agreed. For the Customer Delivery weekly operational meeting, this included winter plans, resourcing plans for the distribution network/contact centres and leakage and incident cover response. For the Production weekly operational meeting, this included Treatment works output and storage levels.

- Thursday 1 March 2018:
  - Liv Garfield was notified of the preparations being made and the expected weather status for the STW region. Regular updates were then provided up to and during the incident.
  - Both Sarah Bentley and James Jesic were notified when the bronze incident was called, following severe weather triggers being breached. Whilst the bronze incident was effectively managed at a team leader level as per our established incident management procedures, regular updates were provided by on call duty rota strategic leaders and business leaders.
- Friday 2 March 2018:
  - Liv Garfield informed the Chairman of the Board of our contingency plans
  - Communication between Sarah Bentley, James Jesic and the on call duty rota strategic leaders and business leaders were increased and regular update calls were held through the weekend.
- On Sunday 4 March 2018, the incident was escalated to Tactical and then to Strategic level. Our incident management procedures set out clear roles and responsibilities for the Executive at both levels and these procedures were quickly put into practice.
- The Executive team were formally notified of the escalation to both Tactical and Strategic levels as part of a 'group text' sent by Network control at 17:13 and 18:18 respectively however, the majority of the Executive Team had already been made aware of the escalation by call or 'one to one' text. Once notified, the Executive Team mobilised and began immediate preparation for their respective roles (for specific details of their respective roles during the incident please see our response to question 4 below).

**Question 4: Had the freeze and thaw event escalated to them, such that they were aware of the full scale and severity of the event.**

***The role of our Executive team***

- Given the early engagement of the key members of our Executive Team they were in a position to mobilise quickly once the relevant incident triggers were hit. The tactical incident trigger for severe cold weather was breached on Sunday 4 March 2018 and the incident was escalated to a Strategic Incident on the same day, a decision which directly

involved Sarah Bentley, James Jesic and Liv Garfield. Our incident management procedures set out clear roles and responsibilities for the Executive Team at both levels.

- Once the Strategic Incident had been called on Sunday 4 March 2018, our Executive Team were fully mobilised and remained so throughout the incident. An overview of the activities undertaken by the Executive Team is set out below numbered 1-6 and the specific roles each Executive played is summarised in the subsequent Table 1:

1. Strategic Commander (present in the Severn Trent Centre incident room in Coventry)

In accordance with our SIMP (Appendix B1 in our original response), key activities include:

- Responsible for leading the overall Incident
- Setting up and leading the Strategic Incident Management Team
- Setting out the strategic objectives in accordance with our SIMP, and maintaining the strategic view and longer term objectives
- Ensuring all required resources are available
- Ensuring all stakeholders are kept informed
- Agreeing the triggers to return to business as usual
- Running the incident covering 24/7 with 12 hourly handovers
- Protecting the safety and welfare of everyone involved

2. Severn Trent Centre incident room and field based incident room workstreams

Key activities include:

- Leading the localised incident team
- Ensuring all required resources are available
- Ensuring all stakeholders are kept informed
- Regular 2 way communications with the SIMT to provide updates and requests for support.
- Protecting the safety and welfare of the local teams

3. Supply chain mobilisation

Key activities include:

- Liaising with our wider supply chain to identify skills, resources tools and equipment to help support the incident response
- Identifying specialised skills as required to support the incident response
- Ensuring support contracts such as alternative water supplies contracts function as required and deliver to the right high quality standards.
- Ensuring the safety and welfare of our supply chain.

4. Customer liaison including management of bottle stations

Key activities include:

- Identifying impacted customers
- Ensuring all customers receive the relevant information
- Ensuring all vulnerable customers receive the right support and response

5. LRF and stakeholder (e.g. CCWater, Ofwat, Defra, DWI, EA and MPs) management

Key Activities include:

- Engagement with relevant Local Resilience Forums to share information, agree support required and logistics (i.e. bottled water drop locations)
- DEFRA, Ofwat and all other relevant parties are updated as required
- Applicable attendance at the relevant meetings and calls (an example of this, please see Appendix Q4.1)
- Briefings to MPs, parish councils and other interested parties
- Close liaison with communications workstream to ensure 24/7 coverage

Examples of relevant stakeholder feedback includes:

- Wednesday 7 March 2018: Mark Pawsey MP (Member of Parliament for Rugby) feedback addressed to Liv Garfield (Appendix Q4.1.2)
- Thursday 8 March 2018: Ofwat feedback addressed to Tony Ballance (Appendix Q4.1.1)

6. Media spokesperson and overall communication

Key Activities include:

External

- Delivering timely valuable information to our customers across all available media platforms, such as written, verbal, social media, website, television
- Liaison with LRFs for consistent communication
- Conducting TV and radio interviews
- Communication with non-household customers (e.g. JLR, Cadbury)

As part of our media coverage assessment, Kantar Media produced a report showing that during the incident period there were 744 articles issued with 76% of that coverage being positive in nature. Maximising the potential for customers to hear messaging there were 502 pieces on regional broadcast, with 127 pieces on BBC Radio Derby alone. We used spokespeople wherever possible with our CFO James Bowling, carrying out television interviews from sites in Rugby, Birmingham and Derbyshire over the course of the incident.

Internal

- Internal communications within the wider incident team
- Internal communications to all employees (including those involved in business as usual activities) with up to date information, requests for support and general updates
- Continuous internal update calls with Communications workstream to ensure reach of communications and channels
- Regular incident update calls with on-call staff
- Internal debriefs between Executive Team members and dual strategic commanders (James Jesic and Sarah Bentley)
- Communication with the Board
- Internal calls to share lessons learnt from previous events

Examples of internal communications from the Executive Team include:

- James Jesic sent an internal communication on Sunday 4 March 2018 (Appendix Q4.2) informing staff of the Strategic incident and requesting for volunteers. Shortly after that Liv Garfield issued an internal update on the Company's 'Yammer' forum (Appendix Q4.3).
  - Neil Morrison's vlog from the bottle water station at Rugby (Appendix Q4.4).
  - A communication sent by James Jesic, Liv Garfield and Sarah Bentley on Friday 9 March 2018 (Appendix Q4.5) to inform staff that all customers were back on supply and express their gratitude for the help provided.
- The specific activities undertaken by each Executive Team member are summarised below:

**Table 1: Executive Team activities (the numbers in the table refer to the activities 1-6 described above)**

	Sunday 4 March	Monday 5 March	Tuesday 6 March	Wednesday 7 March	Thursday 8 March	Friday 9 March
Chief Executive Officer (Liv Garfield)	2 6	2 6	6 5	6	2 6	2 6
Chief Financial Officer (James Bowling)		4 6	4 6	4 6	6	
Chief Customer Officer (Sarah Bentley)	6	1 2	1 2	1 2 6	1 2	1 2
Director, Strategy and Regulation (Dr Tony Ballance)		5	5	5	5	5
Managing Director, Production (Dr James Jesic)	1 2 6	1 2 6	1 2 6	1 2 6	1 2 6	1 2 6
Chief Engineer (Martin Kane)		1 2	2	2 6		

	Sunday 4 March	Monday 5 March	Tuesday 6 March	Wednesday 7 March	Thursday 8 March	Friday 9 March
Group Commercial Director (Helen Miles)		4	2 3	2 3	2 3	2 3
Director, Human Resources (Neil Morrison)		4	4	4		
Managing Director, Business Services (Andy Smith) – on leave	6					
General Counsel and Group Secretary (Bronagh Kennedy) – on leave						

### **Non-Executive Board member updates**

- The Non-Executive Board members were kept fully up to date both prior to and during the event. Liv Garfield informed the Chairman of our contingency plans on Friday 2 March 2018. Subsequently, on Sunday 4 March 2018 she informed the Chairman and the Non-Executive Board members of incident escalation to Strategic level.
- The Non-Executive Board members were provided with regular email updates directly from the Strategic Commanders as the incident unfolded as summarised below. One or more Non-Executive Board member responded to each email update.

**Table 2: Board Updates**

	Date		To	CC	From	Subject	Summary
Sunday	04.03.18	22:31	Non-Executive Board members	James Bowling and Liv Garfield (Executive Board members), James Jesic	<b>From:</b> Sarah Bentley	<b>Subject:</b> Freeze/Thaw update	- Background to the freeze/thaw issue and its impact on the network - Decision to escalate to strategic event - Focus over the coming hours - James Jesic to lead incident room overnight and provide a further update
Monday	05.03.18	06:04	Non-Executive Board members	James Bowling and Liv Garfield (Executive Board members), Sarah Bentley	<b>From:</b> James Jesic	<b>Subject:</b> Freeze/Thaw update	- Update on network issues - Mention of Birmingham, Rugby and Leicester - Comms and vulnerable customer update
Monday	05.03.18	22:04	Non-Executive Board members	James Bowling and Liv Garfield (Executive	<b>From:</b> Sarah Bentley	<b>Subject:</b> Freeze/Thaw update	- Update on network issues and supply restoration - Mention of Birmingham, Rugby and Leicester

Date		To	CC	From	Subject	Summary	
			Board members), James Jestic			<ul style="list-style-type: none"> <li>- James Bowling and Neil Morrison leading on site bottled water stations in Northfield and Rugby respectively</li> <li>- JLR and Cadbury normal service resumed</li> <li>- Martin Kane leading until 3pm, handed over to Sarah Bentley and James Jestic for afternoon/evening and overnight lead</li> <li>- Comms update</li> </ul>	
Tuesday	06.03.18	06:14	Non-Executive Board members	James Bowling and Liv Garfield (Executive Board members), Sarah Bentley	<b>From:</b> James Jestic	<b>Subject:</b> Freeze/Thaw update	<ul style="list-style-type: none"> <li>- Update on network issues and supply restoration</li> <li>- Vulnerable customer update</li> <li>- Media increase due to JLR and Cadbury</li> <li>- Executive Team supporting on various workstreams</li> </ul>
Tuesday	06.03.18	16:20	Non-Executive Board members	James Bowling and Liv Garfield (Executive Board members), James Jestic	<b>From:</b> Sarah Bentley	<b>Subject:</b> Re: Freeze/Thaw update	<ul style="list-style-type: none"> <li>- Update on network issues and supply restoration-an overall improving position of strategic grid, stabilisation of Birmingham, Derbyshire and Nottingham</li> <li>- Alternative supplies update - water bottle stations operational in Birmingham</li> <li>- Media update - positive news; compensation message scheduled to be announced</li> <li>- Update on stakeholder, government and LRF activities - briefings of Therese Coffey by CEO, the Welsh Minister and regular contact with Defra</li> <li>- Recovery workstream mobilisation to ensure readiness to incident de-escalation</li> </ul>
Wednesday	07.03.18	08:57	Non-Executive Board members	James Bowling and Liv Garfield	<b>From:</b> James Jestic	<b>Subject:</b> RE: Freeze/Thaw update	<ul style="list-style-type: none"> <li>- Update on network issues and supply restoration (including new issues in existing areas)</li> </ul>

Date		To	CC	From	Subject	Summary	
			(Executive Board members), Sarah Bentley			- Weather issues in Nottinghamshire - Media update - Executive Team and senior leaders deployed around the business	
Thursday	08.03.18	16:27	Non-Executive Board members	James Bowling and Liv Garfield (Executive Board members), James Jesic	<b>From:</b> Sarah Bentley	<b>Subject:</b> RE: Freeze/Thaw update	- Update on network issues and supply restoration-network back to pre-incident levels - Pictures of difficulties faced - Still running at strategic incident level but plans to de-escalate over coming days
Friday	09.03.18	18:22	Non-Executive Board members	James Bowling and Liv Garfield (Executive Board members), James Jesic	<b>From:</b> Sarah Bentley	<b>Subject:</b> RE: Freeze/Thaw update	- Final update - all customers back on stable supply -De-escalated to tactical incident level and carefully transitioning to normal business operations

- A detailed example of the above is provided at Appendix Q4.6