London Ambulance Service NHS Trust
New Year's Day CAD Outage
Response to questions raised by the Patients Forum.

A) Who are the members of the independent inquiry set up to investigate the outage?
PA Consulting have been engaged to undertake an external review of the Trust's IMT Resilience. PA will present their report to the Trust Board. A copy of the report will also be sent to the System Executive Group established by NHSI and NHSE in their roles as system regulators. This group includes the Chief Information Officer for NHSE and NHSI (a joint appointment across the two organisations).

B) What are the terms of reference for the inquiry?
The agreed Terms of Reference of the IT Resilience review are:
- Fully understand the complex underlying issues with the LAS CAD solution. Evaluate, respond to and ensure appropriate actions are taken from the Root Cause Analysis provided by your suppliers.
- Support and enhance the IM&T management and leadership capability, including implementing any immediate actions that come out of the incident review or we believe are required from our experience of Best Practice IT service management.
- Perform a more holistic resilience review that will cover a range of business and technology resilience angles including, but not limited to, hardware infrastructure resilience; software package resilience; contractual position of IT services; EOC business resilience; staff resilience.

C) Can I observe the inquiry?
I would be happy to brief you on the progress of the review. You will be provided with a copy of the findings of the review when it is competed.

D) Have our questions below been submitted to the inquiry?
The questions raised by the Patients Forum have been shared with PA Consulting.

(1) How many major outages have there been each year since the installation of the system that caused a total breakdown?

The following table identifies all system outages since the current CAD went live in. There were no failures or outages in that year.

	Date	Reason LAS went paper
1.	25/12/2013	Command Point outage
2.	26/12/2013	Power failure – issues outside of Command Point leading to not being able to use Command Point
3.	22/7/2014	Command Point outage
4.	17/9/2014	Command Point outage
5.	20/9/2014	Other IT issue (Gazateer failure) leading to not being able to use Command Point
6.	10/11/2014	Power failure – issues outside of Command Point leading to not being able to use Command Point
7.	22/3/2015	Command Point outage
8.	28/5/2015	Other IT issue (network router) leading to not being able to use Command Point
9.	27/6/2016	Command Point outage
10.	22/11/2016	Command Point outage
11.	1/1/2017	Command Point outage

(2) How many outages have there been on Command Point that have been serious but not complete breakdowns each year over the same period?

None other than those noted above.

(3) Was there a process of completely independent scrutiny of Command Point resilience when it was in the design stage and when it became fully operational?

An external review of the CAD implementation was presented to the Trust Board in 2012.

4) Who is carrying out the investigation into the January 1st outage and who are the independent members of the investigation team?

PA Consulting has been appointed to undertake the IT Resilience review.

5) How has the SI has been described for the investigation and what will the process and timescale be?

The CAD Outage has been declared as a Serious Incident and a full investigation is being undertaken. The SI incorporates the IMT Resilience work, a Clinical review and an Operational review. The intention is to publish the SI report by the end of May 2017.

6) What learning has taken place since January 1st to prevent further outages?

We are taking this incident extremely seriously and have launched a full external investigation to establish the exact circumstances around the technical diffuclties we experienced.

While this investigation is taking place, we are carrying out extra on-going checks and monitoring to ensure the system is robust and stable.

7) How confident are you that further outages will not occur?
Our system is now stable. We are carrying out on-going checks and monitoring while the investigation takes place. Throughout the technical difficulties, we continued to prioritise our response to patients with life-threatening conditions, as usual.

We are fully investigating the root cause of the technical difficulties we experienced on New Year's Day and are continuing to check and monitor the system to ensure it is robust and stable while this investigation takes place.

8) What was the impact on LAS responses to Cat A and Cat C calls in terms of response times to calls January 1st?
We know that some people waited longer than they should have for their call to be answered and we are very sorry for this delay. We have launched an investigation into the cause of the failure and any impact on patients.

It would not be right for us to predict the outcome of this investigation. However, our staff are fully trained and practiced in using this manual back-up system and worked incredibly hard that night to continue to prioritise our response to patients with life-threatening conditions as normal.

9) We are aware that one serious outcome has been identified. Do you have details of any other consequences of the outage for patients?
We are aware that sadly a patient died during the period when our computer system was not working and we have launched a separate investigation to establish whether the computer issues may have been a contributing factor.

It is too early to say what the cause of this patient's death was but we will report on the findings when the investigation is complete.

10) Does it look as if the problem was with the database rather than the equipment?
We are fully investigating the exact circumstances of what happened to the system on New Year's Day and are continuing to check and monitor the system to ensure it is robust and stable while this investigation takes place.It would not be right for us to predict the outcome of this investigation.

11) Is anything more known from analysis provided by Northup Grumman? Did the NG instituted diagnostic process reveal anything of relevance?
NG are actively supporting the investigation into the outage. The findings of the investigation will be shared when the report into the outage is published.

12) At a Board meeting a couple of years ago that there was a discussion about a Command Point resilience project and a request for changes to the software – was this part of a developing process or a one off?
"Requests for Change" are a normal part of the management process for any system. They are used for a wide variety of reasons including system updates and requests made by the Service for new functionality.

13) Our previous questions and responses are shown below. Do you have anything further to add to these responses?

A) Does Command Point have sufficient capacity to deal with the annual increases in demand? I think this is running at about 10% per year. Yes, our increase in demand is not an issue for Command Point. We believe the underlying problem may be related to the capacity of the databases, rather than the system itself, but this is part of the investigation and it would be imprudent to comment further until we have more information.

Update. System capacity is not seen as cause or factor in the NYD outage.

B) Is there an end point in relation to software design and capacity of the system, if demand continued to grow by 10% each year? Not that I am aware of.

Update. No further update.

C) If the capacity of Command Point is a problem can the capacity of the system be increased? As above

Update. No further update

D) Does the system or software need to be upgraded to prevent further outages and would there be any problem in enacting such upgrades? We are working closely with Northup Grumman (who have already started an investigation in the US, by opening up their diagnostic lab) to look into this. Until the investigation is complete it would not be appropriate to speculate.

Update. No further update.

E) Are there any plans for the use of programmed outages to overhaul the Command Point system? We do undertake regular programmed outages of CP. These are referred to as OP 66 – which is when the EOCs go to paper, and we revert to dispatching by radio. These are not an overhaul of Command Point, but the opportunity to reset the databases. We have a schedule to undertake these planned take downs of the system. As you will remember from 2011, it is vital that the Control Rooms and our frontline staff remain well versed and practiced in the paper and radio based contingency position.

Update. A "programmed" outage is planned for 21st February. A detailed plan is in place to manage this event, this includes Trust Board sign off and review by NHSE.

E) Will you let me know the outcome of your enquiry into the January 1st outage? Yes, as in my email above I am happy to commit to this. It would be very helpful to have you involved in the investigation.

Update. No further update.