

Gemini Sustain Plus Focus Group

28th April 2025 1.00pm – 2.30pm

In partnership with





National Gas Transmission



Agenda

Implementation & Cutover Summary	• Andy/Chris	
Gemini stats (ticket volume/ API / Health)	• Andy	
Hot Topics	• Maneesh	
Key reminders	• Karl	
Questions and feedback – from Q&A	• Andy Simpson/Karl Davidson	

Gemini Sustain Programme.

Market Trials

MKT1:

211 Users

83 Organisations

MKT2:

410 Users

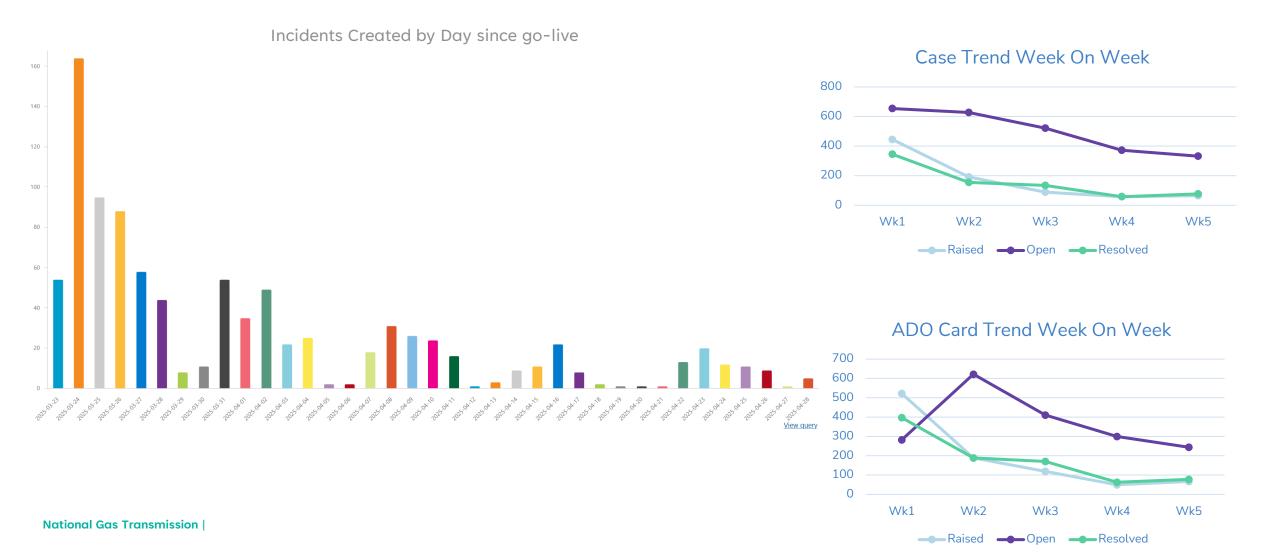
120 Organisations

Microservices	Screens	Pages	Lines of Code	
21	896 (with	2177	>5m	
	~20K hits/day)			
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Internal APIs	External API	S	Interfaces	
3698	60 (with hits/day)	>1.2m	198	
	\mathcal{C}			
Jobs	DevOps		Data Migration	
497	32	1	TB	
		9.	5 Billion record	S

Implementation / cutover Summary

- 1. We have now Implemented the new Gemini system
 - Implementation/cutover took place on Sunday 23rd March 2025
 - The cutover outage ran from **3am to 1pm**
 - The new system has been **completely re-designed**, hosted on Azure Cloud, with a new Database, new UI and new microservice-based architecture
 - This was one of the most **complex** implementations we have ever carried out, due to:
 - Keeping the **legacy** Gemini system up and running right up to the start of the cutover outage
 - Ensuring seamless data migration
 - Carefully managing the **files and batch jobs** (holding them, catching them up, and then releasing them to the normal schedule)
 - Disconnecting and then re-establishing interfaces to multiple systems, including APIs to the new database
- 2. The new **DevOps support model** is now in place
 - Users can raise tickets via the **Service Desk**, as well as through the functionality **within** the new Gemini system
 - New microservice architecture means that we can roll out targeted fixes without the need for outages
 - During Early Life Support we had been delivering hotfixes frequently into Production (multiple times a day)
 - As the system stabilises (as indicated by lower ticket volumes) we will establish a more scheduled fix frequency
- 3. Going forwards, the programme team will be focusing on system stability and delivering Regulatory change over the coming months.

Gemini Sustain Plus – Ticket Trends

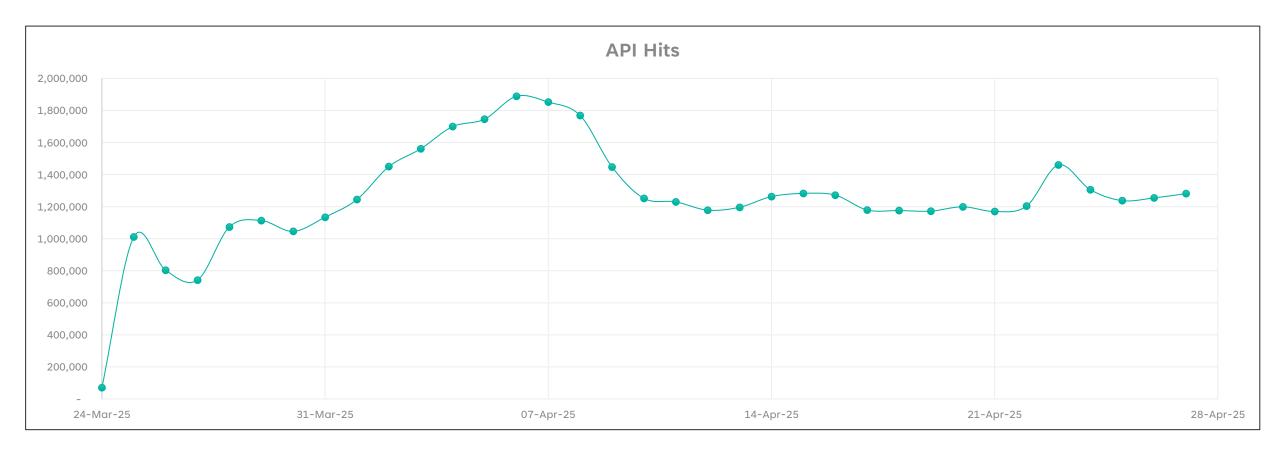


Gemini Sustain Plus – Gemini health

System Availability					System Performance Server Browser Local Time: Last 30 days Roles = All Image: Colspan="2">Image: Colspan="2">Image: Colspan="2">Image: Colspan="2">Image: Colspan="2">Colspan="2">Colspan="2">Colspan="2" Server Browser Image: Local Time: Last 30 days Roles = All Image: Colspan="2"			
Local Time	Local Time: Last 30 days							
Availability	0			Line Scatter Plot) Operations Dependencies Roles			
100.00%					Operation times: zoom into a range			
80.00%					2.0 sec			
60.00%					1000 ms			
40.00%					0.0ms			
20.00%					Request count ~			
0.00%					0			
	Sun 30	Sun 6	Sun 13	Sun 20	Sun 30 Sun 6 Sun 13 Sun 20			
0	Sun 30	Sun 6	Sun 13	Sun 20	Sun 30 Sun 6 Sun 13 Sun 20			
11:37 AM				12:37 PN	11:50 AM 12:50 PM			

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Gemini Sustain Plus – API usage



Hot topics during Hypercare

1. API concurrency issue

- This was initially noticed on the ViewShipperTradeDetails API that responses did not match the User ID of the request.
- This was caused by a very high number of concurrent requests hitting the API and being processed within the same millisecond. The responses were then mismatched to requests.
- A solution was identified, and a **multi-thread fix** for this API was implemented to ensure that the concurrency issue was removed and the request and responses matched.
- This fix is currently being rolled out across all the APIs and will be completed by the end of April; currently 44 APIs have had the fix applied
- The most used APIs have been prioritized, with the remainder yet to be fixed having very few hits (<30 per month total)

2. Nomination lock issue

- When a shipper places nominations through the **UpdateNomination API** containing the same Activity Numbers, Service ID, Gas Day, Start Time and Quantity as existing Nominations, it was causing the nominations to **lock** (and an error message was shown)
- Subsequently, when the shipper retries, they get a Nomination Lock error
- These locks were only being released **one hour** after the lock time
- We carried out a fix to prevent the issue from recurring, which allowed the nominations to be updated (as per legacy)

3. Day ahead auction issue (WDDSEC)

- There was an issue with the timing of the allocation of bids for this auction
- Specifically, the allocations take place a 15 minutes past the hourbar but are only supposed to allocate those bids in the previous hourbar
- For example, allocations running at 10:15 should only allocate bids received between 9:00 and 10:00
- Whereas, allocations received at, say, 10:10 were also being allocated
- This timing issue was rectified with a code fix
- Auction processes were monitored through Early Life Support and the issue has not recurred

Key Reminders

API issues and information provide

When raising an issue for any API please ensure that you include the following;

- The Client ID of the API you are experiencing the issue with
- The API payload/request used
- The full API response with error code

Please include this detail in the ticket so as not to delay resolution.

Service Now ticket UI functionality reminder

Within the upgraded Gemini system, Users have the ability to now raise a service ticket from the User Interface (UI)



We have added the **functionality** to submit word, Excel and PDF documents as an attachment, in addition to the JPEG/PNG file types, so users are able to add multiple screen shots into 1 document to help progress tickets.

Ticket escalations

During the current Early Life Support (ELS) phase, if additional advice is required to help with resolution of tickets, the programme team are able to provide one on one calls with customers to troubleshoot. Please contact us if this support is required.



Q & A

Thank You



- All the information from today will be loaded on to our dedicated Gemini Sustain Plus Website: <u>Gemini Sustain</u> <u>Plus (xoserve.com)</u>
- We will also update the Q&A captured today
- We will be issuing a feedback survey on Gemini shortly and would encourage all recipients to fill in a response to ensure their feedback is captured.

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