

Lloyd's 2024 Market Wide Scenario Exercise Report

December - 2024

Executive Summary

- This report provides a session-by-session overview of the responses collected during the 2024 Market Wide Scenario Exercise which took place over 4 days, with a morning and afternoon session each day, beginning on Monday 14 October 2024.
- The exercise involved a layered scenario which focused on a disruption to Blueprint Two Cutover caused by a cyber-attack, preceded by a surge in claims volumes caused by a CAT event of unprecedented scale
- We collaborated with various internal and external SMEs during the planning phase to help develop a suitable scenario that balanced both severity and plausibility
- The exercise was delivered on the Social Simulator platform
- The aim of the exercise was to allow market participants to test their operational resilience against varying levels of disruption while simultaneously testing their Blueprint Two preparedness
- This report has been structured to try and highlight areas of good practice as well as common responses to the questions posed during the exercise
- This exercise has also served to highlight any actions and next steps, which can be seen in further detail on slide 13

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Scenario timeline summary

Session 1	Session 2	Session 3	Session 4	Session 5	Session 6	Session 7	Session 8
3 weeks before cutover, Mon 16 June	4 days ahead of technical cutover and controlled launch, Tues 8 July	DPS launch to full market, morning, Weds 9 July	DPS launch to full market, midday, Weds 9 July	48 hours after outage confirmed, Fri 11 July	10 working days after outage, Weds 23 July	One week later, Weds 30 July	-
Catastrophic earthquake hits US West Coast, causing unprecedented destruction across several states Insurance market experiences extremely high levels of claims volumes, covering property damage, business interruption and liability for casualties	A reminder that submission block starts the following day Insurance market still managing unprecedented strain from the earthquake: - Billions in losses - Premiums impacted - Economic ripple effect	Velonetic status page showing some level of disruption (amber status) Investigation uncovers an undiagnosed issue impacting claims processing	Velonetic status page showing full outage of all systems (red status) Access to all Velonetic IT services suspended Press coverage of systems outage Specifics still not disclosed	Velonetic status page still showing full outage of all systems (red status) Velonetic provide update that their systems were targeted as part of a deliberate attack from potential threat actor Decision made to shut down all IT services on DPS and persisting heritage systems Press coverage on potential cyber hack	Velonetic status page still showing full outage of all systems (red status) Velonetic provide update that they have identified how to safely bring all systems back online, testing of the fix to begin shortly Customers advised to expect disruption for the rest of the week Hacker group Phoenix Locker claim responsibility	Velonetic status page shows all systems back online (green status) All services now restored, Velonetic closely monitoring all systems	No scenario updates in the final session Final set of questions from Exercise Control reflecting on exercise

Exercise timeline – Monday 16 June, 3 weeks before cutover - Catastrophic earthquake hits US West Coast, causing unprecedented destruction across several states Insurance market experiences extremely high levels of claims volumes, covering property damage, business interruption and liability for casualties

Tasks and Questions

- 1. How prepared do you feel for the nonsubmission period ahead of the technical cutover and the DPS services being available to the full market on a scale of 1-5 2. At this stage, does the increased claims volume cause any concern in relation to your preparation for cutover, (particularly in relation to the submission block and closing off stagnant/work in progress claims)?
- 3. List your priority actions at this stage.
- 4. List activities you are undertaking as part of your BP2 readiness programme.
- 5. What other steps might you take at this stage to protect your business?
 6. Write a status update for your senior leadership team.

How prepared do you feel for non-submission period? Not at all We have begun to prepare Somewhat prepared Well prepared How prepared Fully prepared having stress tested our plans internally

Priority actions mentioned at this stage

- Engage with Claims, Actuarial and Exposure management teams to develop forecast of claims volumes
- Invoke some form of Major Event Response Group
- Understand and manage the loss fund levels
- Communicate with brokers to understand impact
- · Assess resource requirements/capacity
- Broker responses mentioned deprioritising some activities (bordereau, interim advice etc.)
 and prioritising others (first advice out to the market, develop fast track channel for EQ
 exposure)
- Few mentions of ensuring the safety and wellbeing of locally impacted colleagues

Common activities mentioned for Blueprint Two readiness

- · Technical readiness and internal cutover plans drawn up
- · Review of IBS and ITOLs
- Extensive scenario testing carried out with lessons learned documented
- · Additional training for individuals impacted by Blueprint Two identified
- Management and resolution of old/stagnant claims
- Creation of a Blueprint Two working group
- · BCP/DR plans reviewed
- Identified Blueprint Two specific risks and documented all preventative/reactive controls and workarounds

Good examples of status updates considered the following:

- · An update on the list of priority actions at this stage
- Mention of communication with TPAs and service providers
- Early exposure estimates with update on expected net position
- Assessment on the earthquake's impact to the firm's Blueprint Two preparedness
- Flagging the potential for additional resource requirements (if necessary)

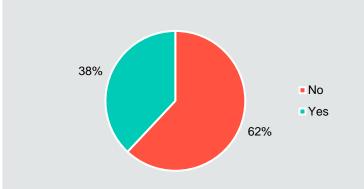
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Exercise timeline – Tuesday 1 July, 4 days ahead of technical cutover and controlled launch - A reminder that submission block starts the following day and the insurance market is still managing unprecedented strain from the earthquake: Billions in losses, Premiums impacted, Economic ripple effect

Tasks and Questions

- 1. Have you activated your crisis comms plan at this stage? Yes/No
- 2. List your key internal and external stakeholders, in order of priority.
- 3. Identify which of these stakeholders you may need to communicate with ahead of the weekend.
- 4. What are the immediate considerations and impacts for your organisation's IBS?
 5. How will the message from Lloyd's be cascaded through your organisation?
- 6. Describe the steps you need to initiate, to minimise the impact of cutover.
- 7. Describe how you have planned for differing levels of disruption during cutover.
- 8. Describe how you will evaluate the success of your plans to manage disruption?

Have you activated your crisis comms plan by this stage?



Evaluating the success of plans to manage disruption

- Many responses mentioned planning to measure deviation from BAU service levels, monitoring SLAs, and remaining within ITOLs
- More details answers included: Claims service standards operational metrics; Claims Payment volume/value; Availability and access to funds; Transition to new systems; Level of litigation; Complaints volumes; Estimated exposure vs actual claims; Social Media Monitoring; Employee wellbeing; Market perception

Stakeholders listed Internal

- Teams Incident Management Team, Crisis Management Team, Claims Teams (including experts eg engineers), IT, Operations, Finance, Reinsurance, Credit Control, HR, Comms, Compliance, Internal Audit, BP2 Project Team, employees.
- Senior stakeholders Board, Senior Leadership, Shareholders, Investors, Parent Company

External

- Brokers, Coverholders, policy holders, TPAs, loss adjusters, reinsurers, auditors
- Press
- General public
- Partners and suppliers eg outsourcing partners and third party suppliers, including
 Comms and PR functions
- Associations and Regulators PRA, FCA, Lloyd's, LMA, regulators in other countries (where applicable)
- Some participants ranked their stakeholders with differing priority levels, others noted that they would ensure that internal and external comms would go out concurrently.

To consider - Ensure that a comprehensive list of key stakeholders, their contact details, and preferred method of communication is kept up to date ahead of an issue or incident. This will save time should you need to make use of it in an actual crisis.

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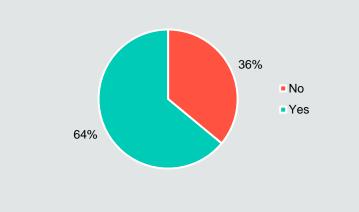
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Exercise timeline – Morning Wednesday 9 July, Controlled launch successful meaning DPS is launched to the full market - Velonetic status page showing some level of disruption (amber status) and an investigation uncovers an undiagnosed issue impacting claims processing

Tasks and **Questions**

- 1. If you haven't already, have you activated your crisis comms plan? Yes/no/done
- 2.List your immediate priorities.
- 3. Draft a scenario plan that anticipates the issues you may need to deal with, should you be unable to start submitting claims the day the submission block ends. Identify the level of impact each scenario could have on your organisation.
- 4. Provide an updated stakeholder list, as necessary.





Updated stakeholder lists

The main changes participants made to their stakeholder lists were to add in CISO / cyber security team / cyber support. Others expressed a focus on key stakeholders including Brokers, Adjusters and TPAs.

Scenario planning

Participants tackled scenario planning in a range of ways.

Good answers included an assessment of the likely impact scenarios might have and ideas for how to mitigate the impact of different scenarios.

Areas participants were concerned about:

- the extent of the cyber attack and whether it might also affect participants own IT systems
- · falling behind BAU service levels
- · complex reconciliation post-incident depending on the length of the system outage
- · an increase in complaints
- · ability to fully respond to regulator requests for information
- further CAT events

To consider - when scenario planning it can be helpful to assess potential issues for their likelihood - low, medium, or high and their potential impact, again as low, medium, or high to help you to focus on planning for the situations that are more likely to occur and would have the highest impact.

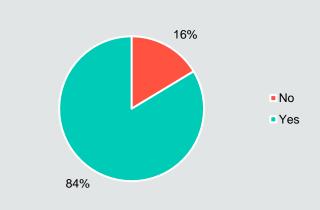
Classification: Unclassified

Exercise timeline – Midday Wednesday 9 July, DPS has been launched to the full market - Velonetic status page showing full outage of all systems (red status) and access to all Velonetic IT services suspended. There is press coverage of systems outage and the specifics have still not been disclosed.

Tasks and Questions

- 1. We have a triage system in place for situations like this. Yes/No
- 2. Identify the levels of triage you have in place for different teams and departments.
- 3. Reply to the messages requesting information. Will you issue any other internal and external communications at this point?
- 4. Describe your plan for renewals and how to process these.
- 5. Could this (or has this) trigger a breach of any ITOLs?
- 6. Draft a status report describing how the latest developments are impacting your organisation. Include an assessment of how this latest incident will impact your recovery from the earthquake.

Do you have a triage system in place for situations like this?



General findings from the status updates at this stage

- Mixed responses regarding how much of an impact the unavailability of DPS services would have at this stage, predominantly as a result of differing exposure levels
- Those who remained unphased tended to be the ones who were at a better stage of preparedness leading up to cutover (playbooks tested, manual workarounds documented, backlog cleared pre cutover)
- For those more heavily impacted, most felt comfortable switching to manual processing of claims, despite increased claims volumes
- Differing solutions to addressing the increasing claims backlog: Prioritising urgent claims payments; Increasing authority limits on DCAs; Loss funds monitored and managed
- · Still no ITOLs seem to have been breached at this stage

Could this (or has this) trigger a breach of any ITOLs?

- Almost all responses noted that no ITOLs had been breached at this stage, with a couple of responses stating that this situation could potentially cause breaches
- Most noted that if this particular situation were to persist then their Claims ITOL(s) would likely be breached
- There were many responses mentioning that, while no ITOLs had been breached, they had initiated some form of ITOL 'countdown'

Typical responses to internal/external information requests

Internal

- Most noted that internal communications would go out to all staff, either via email or cascaded down through the relevant managers
- Most mentioned that the Board and senior leadership would be informed via some form of Response group

External

- Most said they would not engage with the press
- Ongoing comms with brokers, coverholders and DCAs
- Few mentions of a courtesy notification to the regulators

Exercise timeline - Friday 11 July, 48 hours after outage confirmed - Velonetic status page still showing full outage of all systems (red status) but Velonetic have provided an update that their systems were targeted as part of a deliberate attack from potential threat actor and so the decision was made to shut down all IT services on DPS and persisting heritage systems. There is further press coverage of the outage and on the potential cyber attack.

Tasks and **Questions**

- 1. Will you contact the regulator at this point? Yes/No
- 2. Will you consider manual workarounds at this stage? Yes/No
- 3.If no, identify the triggers to start manual workarounds.
- 4. Prepare a response to the email requesting advice on how to manage requests from brokers for direct settlements
- 5. Update your stakeholder list, with key messages for each.

Have you activated your crisis comms plan by this stage?



Stakeholders engaged at this stage

- Most/all internal functions engaged to manage incident response and coordinate workarounds: IMT, Claims, Underwriting, IT/Ops, Finance/Treasury
- Senior leadership kept well informed. ExCo heavily involved in most cases
- Guidance sought from, and collaboration with, external stakeholders: brokers, DCAs, Critical Third Parties (especially outsourced IT providers)
- Assurance also provided to brokers and policyholders
- Regular contact with Lloyd's and regulators

For Managing Agents - How do you plan on dealing with the requests from Brokers; what are your priorities?

- Most noted that they would lean on Lloyd's Urgent Settlement Guidance
- Regarding claims prioritisation, generally this was done by triaging by scale of business, customer vulnerability, time criticality and CAT exposure
- Many mentions of a Claims Incident Response group being coordinated to lead on prioritisation
- · Good practice was noted in some responses which mentioned a heightened level of due diligence on all claims payments requests to validate claimant and broker details to mitigate against the risk of potential cyber criminals trying to exploit the situation

For Brokers - How do you plan on dealing with the requests from Managing Agents; what are your priorities?

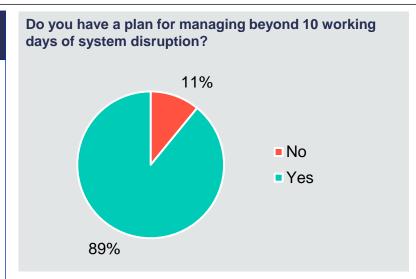
- Much like the Managing Agents, Brokers noted utilising the Urgent Settlement Guidance
- For prioritisation purposes, clients split into: large/complex, commercial and individual vulnerable clients
- Claims prioritisation largely aligned with Managing Agents'
- Producing analysis and reporting on which clients have Lloyd's involvement and removing those who do not from the current scope

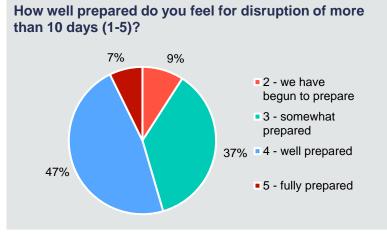
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Exercise timeline – Wednesday 23 July, 10 working days after outage - Velonetic status page still showing full outage of all systems (red status) but Velonetic have provided an update that they have identified how to safely bring all systems back online and testing of the fix will begin shortly. Velonetic also advise their customers to expect disruption for the rest of the week. The hacker group Phoenix Locker claim responsibility for the outage.

Tasks and Questions

- 1. Do you have a plan for managing beyond ten working days of system disruption? Yes/No
- 2. How do you plan on dealing with settlement requests from Brokers?
- 3. Will an extended outage cause any strain on liquidity?
- 4. How well prepared do you feel for disruption of more than ten days on a scale of 1-5
- 5.Describe any plans you now have in place for renewals and processing? 6.Could this (or has this) triggered a breach of any ITOLs?





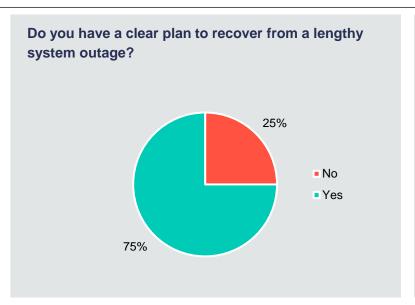
Could this (or has this) triggered a breach of any impact tolerances?

- The vast majority claimed to still be operating within their ITOLs, with some noting that they were close to breaching, or on the cusp
- For those who said that ITOLs had been breached, Claims was (unsurprisingly) the tolerance in question Claims Payment, Handling and Settlement were all mentioned
- Some responses mentioned that the length of disruption could now cause a breach of their Underwriting (Renewals) ITOL, but that this scenario has caused little impact to this IBS, so it remains within tolerance
- Many stated that, due to the effectiveness of manual workarounds, they were able to prevent intolerable harm to the customer, and could continue to do so for some time
- Several responses alluded to a heavy reliance on additional resource, either redeployment internally, or utilising the help of third parties, as a means of being able to remain within tolerances

Exercise timeline – Wednesday 30 July, one week after previous session - Velonetic status page shows all systems back online (green status) and all services now restored. Velonetic are closely monitoring all systems.

Tasks and Questions

- 1. Do you have a clear plan to recover from a lengthy system outage? Yes/no
- 2.Draft a reply to the regulator.
- 3.Identify your priorities as part of reconciliation, list them in priority order.
- 4.Describe how you will determine priority transactions (that are backlogged).
- 5.List any additional impacts and how you can mitigate against these. For example, reputational damage.



Additional impacts and mitigation

- Other potential impacts listed included: Familiarisation with new systems as well as
 recovering from the outage, loss funds running out, lack of available external support and
 resources because this was a market wide event.
- To mitigate these there was a strong theme of transparent communication and support for staff. Examples included ensuring website and external communications are up to date, monitoring complaints as well as ongoing media coverage and social media activity, close contact with market working groups, working with HR to ensure staff wellbeing, review of tolerances and impact, and instigate a lessons learned review.

Main issues with a lengthy outage

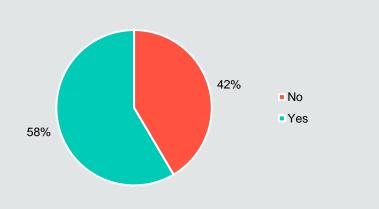
- The issues listed in response to this question largely fell into resourcing or reconciliation. Participants mentioned: Resourcing to fully recover (particularly with summer holidays), staff morale, potential for further issues with new technology, precision of manual processes and ensuring reconciliation is accurate, large cash movements on a single day as system recovers, internal month-end reporting for July, ongoing workload from the earthquake.
- It was good to see how many teams considered ensuring staff wellbeing as a key part of the recovery process.

The final session had no scenario updates just a final survey following the exercise.

Summary of Questions

- 1. Did your existing cutover plan account for other issues happening alongside cutover? Yes/no.
- 2.Do you feel more or less prepared for Blueprint Two following this exercise?
- 3. What did you find most challenging about the scenario?
- 4.Can you identify one or more key learnings from the exercise?

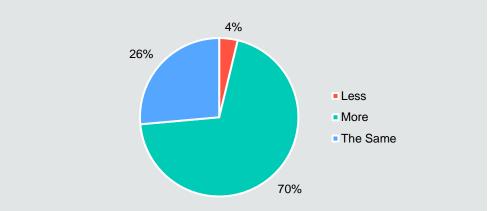
Did your existing cutover plan account for other issues happening alongside cutover?



What did you find most challenging about the scenario? (most common answers)

- · Coordinating responses with different colleagues
- The volume of information we had to provide
- · The scale of the issues we faced

Do you feel more or less prepared for Blueprint Two following this exercise?



Can you identify one or more key learnings from the exercise? (most common answers)

- Some changes are needed to internal processes, and documentation of these processes
- Some changes are needed to roles and responsibilities
- The importance of cross market coordination

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11

Thematic Findings and Key Points

- Participants who managed the disruption well and remained relatively unphased following the earthquake and subsequent surge in claims volumes were those who attested to having a good level of Blueprint Two preparedness prior. In preparation for cutover, these participants had been: carrying out extensive testing of their playbooks, documenting manual workarounds, increasing loss funds if necessary and clearing their backlog in anticipation of the non-submission block.
- There was a natural variation in stakeholders listed by participants due to the varying size and nature of their businesses, but most considered a good list of internal and external stakeholders, with some specifying priorities and others stating that they would issue internal and external comms concurrently.
- Generally, participants who considered themselves well prepared, ranking themselves as 4 or 5 out of 5 at the start of the exercise, had well thought out methods for evaluating the success of their plans to manage disruption.
- Not all scenario plans assessed the relative impact of the scenarios described which would be important in a real-life situation (this may have been due to exercise conditions).
- Not all participants have a plan for managing a long outage, and we'd recommend those without review whether their organisation would benefit from one.
- Towards the end of the exercise, most participants stated that they had not breached any impact tolerances, but would likely be in breach of their Claims tolerance if the disruption continued any longer. This was primarily attributable to a reliance on manual workarounds and we would recommend participants explore the resilience of those manual workarounds in their own future testing.
- The vast majority of participants highlighted one area or more where they could do additional planning or preparation ahead of potential issues or incidents occurring. This is no reflection on the quality of responses, just that there will always be lessons to learn.

Next Steps

Following the exercise, we received feedback from some participants and the LMA Operational Resilience Committee which identified next steps that will require collaboration across the market, these are as follows:

The exercise raised the question of whether participants will require or whether more consideration should be given, to contingency planning and testing of potential issues when cutting over as part of the cutover testing programmes.

The exercise also drew out that Urgent Settlement Guidance should be reviewed and should consider:

- Being more proscriptive and moving away from guidance and instead the creation of clear rules or protocols in the event of market wide disruption.
- There should also be further agreed processes for settlement if an outage extends significantly.
- Consideration needs to be given to how the reconciliation process would work and could be simplified, including the potential for offsetting premiums.
- The settlement process would need further detail and clarity on what to do if the Lead is unavailable to agree settlement.
- Greater consistency in communications when agreeing settlements during disruption requiring agreed formats for communications between brokers and carriers.
- There is also an appetite to test these processes.

Lloyd's will own the continuation of work with the market to refine the settlement processes to be used in the event of market wide disruption.

Both the settlement processes and the communications will need input from market participants and the LMA to ensure a solution is developed which meets the needs of the market.