THE INVESTMENT ASSOCIATION

BUILDING OPERATIONAL RESILIENCE: IMPACT TOLERANCES FOR IMPORTANT BUSINESS SERVICES CONSULTATION PAPER

Joint BoE, PRA, FCA shared policy summary and co-ordinated consultation papers on new requirements to strengthen operational resilience in the financial services sector.

'We want firms to consider the impact of disruption which can come in many forms. For example, technology failures, cyber-related and other operational incidents, including those outside of a firm's control, can all have an impact on the people and businesses (and financial markets) that rely on their products and business services. Operational disruptions and the unavailability of important business services that firms provide, have the potential to cause wide-reaching harm to consumers and market integrity, threaten the viability of firms and cause instability in the financial system.'

They propose firms:

★ Identify their important business services that if disrupted could cause harm to their consumers (retail and wholesale) or market integrity
★ Set impact tolerances for each important business service (i.e. thresholds for maximum tolerable disruption to help achieve consumer protection and market integrity)
★ Identify and document the people, processes, technology, facilities and information that support their important business services (mapping)
★ Test their ability to remain within their impact tolerances through a range of severe but plausible disruption scenarios
★ Conduct lessons learnt exercises to identify, prioritise, and invest in their ability to respond and recover from disruptions as effectively as possible
★ Develop internal and external communications plans for when important business services are disrupted
★ Create a self-assessment document
★ All firms remain responsible for the management of their outsourcing and third-party relationships

Proposals seek to set new requirements that enhance operational resilience rather than supersede existing requirements to manage operational risk or business continuity planning.

<u>Scope:</u>

- Banks
- Building Societies
- PRA/FCA dual-regulated investment firms
- Solvency II firms
- RIEs
- Enhanced scope SMCR firms
- As well as Payment institutions, RAISPs and EMIs.
- 'Firms not subject to this CP should continue to meet their existing operational resilience obligations and may want to consider our proposals'.

<u>Timeline</u>: submit responses by **3rd April 2020** and the FCA will consider all feedback and publish finalised rules in a Policy Statement next year.

- Firms will have three years to remain within their impact tolerances after the rules come into effect
- H2 2020: final rules
- 2021: rules take effect and beginning of transitional period
- 2024: firms to remain within impact tolerances (or as soon as reasonably practicable)

Four example types of firms from different financial services sectors were chosen to illustrate their points and how they would apply to different types of firms:

- Firm A: Dual-regulated high street bank
- Firm B: Enhanced scope SMCR firm that provides wealth management services with a digital-first operating model with retail and institutional consumers. These consumers rely on the investment, transaction and administration services provided through its online platform.
- Firm C: Firm that provides custodian services to small and medium sized asset managers globally. Services include safekeeping of assets, settlements, collections and foreign exchange payments.
- Firm D: Insurer with 350 employees providing life, motor, home and pet insurance.

The emphasis throughout is to apply these proposals in a proportionate way, accounting for differences in size, role and impact on consumers and market integrity if services are disrupted.

- 'Expect that the number of important business services offered by a firm will be proportionate to its role and size. Firms' mapping exercises would also be scaled according to this, with less complex firms likely to have simpler and fewer important business services to map.'

IMPORTANT BUSINESS SERVICES

Feedback received in regard to the initial DP -

- Generally supported focus on continuity of business services – better customer outcomes and a way of breaking down silos
    - However concern raised that in some circumstances taking the system (and therefore the business service) off line might be the safest and most effective immediate response to an event, and in some severely disruptive events it would not be possible to achieve continuity of supply.
- Concern that for larger organisations with more complex business models and supplier relationships, identifying and mapping their business services and accountabilities could be complex, time-consuming, disruptive and disproportionately expensive
- Overlaps with OCIR arrangements
- Asked for more detail on how organisations should identify business services and their most important business services. Additionally, whether organisations would be expected to restructure themselves to create discrete operational business service units.

FCA proposals:

- Propose to use the business services approach as a way for firms to build their operational resilience – firms required to identify their important business services
- Agree that in some circumstances taking the systems/business service off-line might be the safest and most effective immediate response to the event. Expect firms to take this into account as part of their scenario testing.

- Believe that focussing on the possible impact of disruption to business services and on identifying and continuing the supply of important business services, should help boards and senior managers make better-informed strategic, operational and investment decisions. This should include oversight of third parties.
- Propose that firms should identify their **important business services at least once a year**. Firms should also do so whenever there is a material change to their business or the environment in which they operate e.g. providing additional new services or a change in the market has led to the firm providing services to a significantly larger number of consumers or affecting the vulnerability of its existing consumers

Identifying important business services

FCA are not proposing to publish a taxonomy of business services, but rather agree with industry feedback that firms are best placed to identify their important business services.

- Suggests firms consider important business services to be services that, if disrupted, would be most likely to cause intolerable levels of harm to consumers or market integrity.
- An important business service should be:
    - Clearly identifiable as a separate service and not a collection of services
    - Users of the service should be identifiable so that impacts of disruption are clear e.g. retail consumers, business consumers or market participants
- A consideration of those potentially affected by disruption to the service
    - Nature of consumer base, including vulnerable consumers
        - Ability of consumers to obtain the service from other providers
        - Time criticality for consumers receiving the service
        - The size of the consumer base to which the service is provided
        - Sensitivity of data held in the instance of a breach
    - A consideration of impact on the firm itself, where this could cause consumer harm or harm to market integrity
        - Impact on the firm's financial position and potential to threaten the firm's viability
        - Potential to cause reputational damage
        - Potential to cause legal or regulatory censure
        - Level of inherent conduct and market risk
    - A consideration of the impact on the UK financial system
        - The firm's potential to impact the soundness, stability or resilience of the UK financial system
        - Potential to cause knock-on effects for other market participants
        - Importance of that service to the UK financial system which may include market share, sensitive consumers and consumer concentration

FIRM B: identifies administration of investments as one of its important business services as disruption to this could potentially harm market integrity due to the aggregate value of assets it administers. Firm B also considers such an event could cause it to suffer increased operational costs, loss of revenue and reputational damage. The regulated firms which rely on the services provided through Firm B's online platform would also need to take account of the risk of harm to the underlying consumers.

IMPACT TOLERANCES

Feedback received in regard to the initial DP -

- Most supported setting impact tolerances and that this would increase board-level engagement
- Mixed views about whether the supervisory authorities should set impact tolerances for firms or whether these should be set by firms

- Respondents also asked us to clarify the difference between an impact tolerance and business impact assessment and recovery time objectives (RTOs)

FCA PROPOSALS

- Propose that firms should set their impact tolerances at the first point at which a disruption to an important business service would cause intolerable levels of harm to consumers or market integrity. They consider that firms are best placed to determine the point at which to set their impact tolerances.
- Setting impact tolerances is intended to change the mindset of boards and senior management away from traditional risk management towards accepting that disruption to business services is inevitable and needs to be actively managed.
- Impact tolerance: maximum tolerable level of disruption to an important business service with specific outcomes and metrics to measure this
    - Require firms to know their maximum tolerable duration
    - Also understand other metrics may be of relevance e.g. volume of disruption, measure of data integrity.
- When setting tolerances, firms should consider different times of the day, different points in the year or broader factors which may lead to activity within the important business service significantly increasing. This ensures that the firm's impact tolerance applies in peak times as well as under normal circumstances.
- In determining the harms that can be caused to consumers and/or market integrity, proposing that firms consider:
    - Number and types (such as vulnerability) of consumers adversely affected and nature of impact
    - Financial loss to consumers
    - Financial loss to the firm where this could harm the firm's consumers, the soundness, stability or resilience of the UK financial system or the orderly operation of the financial markets
    - The level of reputational damage where this could harm the firm's consumers, the soundness, stability or resilience of the UK financial system or the orderly operation of the financial markets
    - Impacts to market or consumer confidence
    - The spread of risks to their other business services, firms or the UK financial system
    - Loss of functionality or access for consumers
    - Any loss of confidentiality, integrity or availability of data
- They propose that firms **set and review their impact tolerances at least once a year**. Firms should also do so whenever there is a material change to their business or the environment in which they operate.

Proposed expectations:

- 'Firms should use impact tolerances as a planning tool and should assure themselves they are able to remain within them in severe but plausible scenarios'
    - Emphasis is on preparing for 'severe but plausible' scenarios rather than every possible scenario
- **Dual-regulated firms:** expected to set and manage up to 2 impact tolerances for each of their important business services
    - Set 1 impact tolerance at the first point at which there is an intolerable level of harm to consumers or market integrity and another tolerance at the first point at which financial stability is put at risk and for the PRA's purposes a firm's safety and soundness or policyholder protection is impacted.
- **FCA solo-regulated firms:** expected to set 1 impact tolerance for each of their important business services by having regard to the potential harm posed to consumers, market integrity and, where appropriate, financial stability
    - Need to assess if they have adequate financial resources to address potential harm

    - Some firms may conclude that there is no level of disruption to an important business service which would impact market integrity
- Consider that both dual and solo-regulated firms are best placed to decide how to manage their impact tolerances, but expect their methodology and description of potential of harm to be clear.

Propose that firms must be able to remain within their impact tolerances as soon as reasonably practicable, but no later than **3 years**, after the rules come into effect.

FIRM B: identifies that the delivery of investment administration could be disrupted causing harm to consumers. Firm B sets an impact tolerance of 8 hours for the administration of investments proportionate to the size of its market share, the nature of its consumer base and with regard to the time-criticality in ensuring this service is available.

MAPPING

- Firms will need to identify and document the people, processes, technology, facilities and information (resources) necessary to deliver each of a firm's **important** business services
- Expect firms to ensure mapping is complete, accurate, documented and signed-off at an appropriate level by management
- Mapping should allow firms to:
    - **identify vulnerabilities and remedy these as appropriate** e.g. lack of substitutability, high complexity, single points of failure, concentration risk, dependencies on third-parties and matters outside of a firm's control e.g. power failures
    - **enable firms to conduct scenario testing** so they understand the full implications of scenarios
- Want firms to 'develop their own methodology that best fits their business, and to document their mapping in a way that is proportionate to their size, scale and complexity' e.g. via a tool, application or database and use methods such as process mapping, transaction life cycle documentation and consumer journeys.

FIRM B: mapping complex due to the number of interconnecting systems and technology which support the platform service (s), some of which are outsourced to third party providers. Firm B reviews its reliance on third party service providers and engages with counterparties to understand their risk controls and resilience considerations. Firm B has staff supporting its platform 24/7 and has associated issues of under resourcing, high staff turnover and a reliance on manual processing. While these have limited impact on day-to-day continuity of the platform service, Firm B identifies that these could weaken the firm's operational resilience if critical events occur.

SCENARIO TESTING

- Testing firms' ability to remain within their impact tolerances for each of their important business services in the event of a severe but plausible disruption of its operations.
- In carrying out the scenario testing, firms should identify an appropriate range of adverse circumstances varying in nature, severity and duration relevant to its business and risk profile. They should then consider the risks to delivery of the firm's important business services in those circumstances.
    - Taking the systems and therefore the business service off-line might be the safest and most effective immediate response to the event
    - Firms should consider whether a partial resumption, or the delivery of an alternative service, would mitigate impact even if their tolerance is breached

- Understanding the circumstances under which it is not possible to stay within an impact tolerance for a particular important business service will provide crucial information for firms → help them identify resilience gaps and address these
- Consider that firms are best placed to determine the scenarios used for testing
  - Could consider previous incidents or near misses within their organisation, across the financial sector and in other sectors and jurisdictions
  - Firms could also consider horizon risks e.g. evolving cyber threat, technological developments and business model changes
- Firms should be able to explain the level of resilience they have built by justifying the severity of scenarios in which they would be able to resume the delivery of an important business service within their impact tolerances
- To cover a range of severe but plausible scenarios, firms could use an incremental process e.g.:
  - Start by assuming disruption to the resources key to the delivery of important business services
  - Increase severity by assuming simultaneous disruptions to key resources of their important business services or by resources being unavailable for longer time periods
- Firms should ensure that testing considers **realistic timelines** e.g. time required for data analysis and decision making and should develop as the firm learns from previous testing
- They propose the following scenario factors as guidance for firms to consider when testing:
  - Corruption, deletion or manipulation of data critical to the delivery of important business services
  - Unavailability of facilities or key people
  - Unavailability of third part services which are critical to the delivery of important business services
  - Disruption to other market participants
  - Loss or reduced provision of technology underpinning the delivery of important business services
- Firms should develop a testing plan that details how they will gain assurance that they can remain within impact tolerances. The plan should consider:
  - The type of scenario testing e.g. whether it is paper-based, simulations or live-systems
  - The scenarios for which the firm expects to be able to remain within their impact tolerances and which ones they may not
  - The number of important business services tested
  - Testing the availability and integrity of resources. A business service that is available but has compromised integrity is not remaining within the impact tolerance e.g. if a firm resumed service to remain within an impact tolerance when the firm knew there was a significant risk of spreading a computer virus.
  - How communication strategies can be used to act quickly and effectively to reduce disruption by providing clear, timely and relevant information
- Firms should conduct **lessons learned exercises** –encouraging continuous improvements to operational resilience as requires firms to learn from experience as their operations and technology changes and their approach matures over time.
- Deficiencies identified through scenario testing or through practical experience should be addressed as a matter of priority

FIRM B: engages with its business consumers and counterparties to carry out end to end tests for particular services involving all relevant parties. These tests indicate some resilience gaps when faced with a severe but plausible scenario. To address these, Firm B investments in further back-up IT systems, staff training and reduced reliance on manual processes in operational areas as well as investing in monitoring and early detection of potential data loss issues.

COMMUNICATIONS

- Propose that firms should have **internal and external communication strategies** in place – help them to act quickly and effectively to reduce the harm caused by operational disruptions (need to be clear, timely and relevant)
    - Firms' internal communication plans: escalation paths they would use to manage communications during an incident, and identify the appropriate decision makers e.g. address how to contact key individuals, operational staff suppliers and the appropriate regulators
    - External communication plans: firms should consider in advance of disruption how they would provide important warnings or advice quickly to consumers and other stakeholders. This includes where there is no direct line of communication.
- As guidance, propose that firms should also use effective communications to gather information about the cause, extent and impact of operational incidents.

GOVERNANCE

Senior manager expectations under SMCR:

- SMF24 required to have responsibility for managing the internal operations or technology of the firm or of a part of the firm e.g. responsible for:
    - Cybersecurity
    - Business continuity
    - Information technology
    - Internal operations
    - Operational continuity, resilience and strategy
    - Outsourcing, procurement and vendor management
    - Management of services shared with other group members
- Where firms do not have an individual performing the SMF24 function, it will be for the firm to determine the most appropriate individuals within the firm who is accountable for operational resilience.
- Irrespective of firm size or complexity, FCA expect clarity on who is responsible for what within a firm, including for operational resilience.

Board expectations:

- Expect boards/equivalent management body to have appropriate management information available to them to inform decision making
- Individual board members will not necessarily be required to be technical experts on operational resilience but should, collectively, have adequate knowledge, skills and expertise to provide constructive challenge to senior management as part of their oversight responsibilities in relation to operational resilience. E.g. boards should be able to evidence that they are satisfied with the:
    - Identification of important business services
    - Mapping
    - Setting impact tolerances and ability to remain within these

SELF-ASSESSMENT

- Important for firms to be able to demonstrate to the relevant supervisory authority that they are meeting their responsibilities in respect of operational resilience – propose that firms should create a self-assessment including:
    - The firm's important business services
    - The impact tolerances set for these important business services
    - The firm's approach to mapping, including how the firm has identified its resources and how it has used mapping to identify vulnerabilities and support scenario testing
    - The firm's strategy for testing its ability to deliver important business services within impact tolerances through severe but plausible scenarios, including a

    - description of the scenarios used, the types of testing undertaken and the scenarios under which firms could not remain within their impact tolerances
    - An identification of the vulnerabilities that threaten the firm's ability to deliver its important business services within impact tolerances, including the actions taken or planner, and justifications for their completion time
    - The firm's lessons learned exercise
    - The methodologies used to undertake the above activities
- Propose that **boards review and approve the self-assessment document regularly** and also when changes occur that have a clear impact on the firm's operational resilience e.g. structural changes to the firm, rapid expansion, poor trading or entry into new markets
- NOT intending to place a requirement on firms to periodically submit the self-assessment document. Instead, propose that it be sent to us when requested or made available for inspection as part of firm engagement.

OUTSOURCING AND THIRD PARTY SERVICE PROVISION

- Expect firms to have a comprehensive understanding and mapping of the resources that support their business services. This includes those outsourced and third-party services over which the firm may not have any direct control. Also expect firms to be able to identify and document the resources that support their important business services.
- **Firms retain full responsibility** for the delivery of the regulated services of the third parties that lie outside the regulatory perimeter, including any dependency on the third party service provider.
- Not proposing changes to the FCA's Handbook rules and guidance on outsourcing or third-party service provision:
    - Principle 3 in our Principles for Business (PRIN) sourcebook
    - Senior Management arrangements
    - SYSC sourcebook – particularly SYSC 8 and 13
    - MiFID 2 → M2G
- Existing requirements and guidance include appropriately identifying and managing the associated operational risks throughout the life-span of third party arrangements from inception and on-boarding, through business as usual operation and exit arrangements.
- View the provision of cloud services to regulated firms as a form of outsourcing.
    - Firms should be able to assess the impact of these providers on their operational resilience e.g. how cloud service provision affects the assessment of a firm's important business services' operational resilience
    - Domestic guidance and ESA guidelines on cloud outsourcing should be interpreted in a manner proportionate to the size, structure and operational environment of the firm as well as the nature, scale and complexity of its activities
- It is possible to have a key third party service provider relationship that may not be classified as outsourcing e.g. other arrangements between firms and FMIs or strategic partnerships with non-financial third parties → still important that firms identify and manage associated operational risks
- FCA engages with all three ESAs relating to supervision of EU financial markets (EBA, EIOPA and ESMA) – comply with their approach to outsourcing
    - 2017 EBA cloud outsourcing guidelines
    - 2019 EBA finalised guidelines on outsourcing

EBA 'register of outsourcing'

- EBA guidelines on outsourcing provide that those firms subject to the guidelines should maintain a 'register of outsourcing'.
- Intend to explore the EBA 'register of outsourcing' concept more broadly at the domestic level using existing SYSC guidance
- FCA want to have consistent analytical capability on the amount and type of outsourcing that firms are undertaking, and the risks that it may present to the FCA's objectives, including resilience, concentration and competition risks.

- This would be a step-change in our oversight of outsourcing – if progressed, would undertake a formal consultation and seek to ensure that our approach is coordinated with any proposals that the PRA may take.

FCA FG16/5: Guidance for firms outsourcing to the 'cloud' and other third party IT services

- 2016 published guidance to clarify the requirements for all FCA authorised firms when outsourcing to the cloud and other third party IT services. Since publishing FG16/5, the EBA has finalised its own outsourcing cloud recommendations. In complying with the EBA cloud recommendations, the FCA altered the scope of its own FG16/5 guidance so that firms subject to the EBA recommendations do not have to follow both.
- FCA have taken a similar approach to the EBA's recently finalised outsourcing guidelines so that firms subject to the new EBA guidelines on outsourcing do not also need to follow the FCA's FG16/5.

COST BENEFIT ANALYSIS (extensive – 15pages)

FSMA, as amended by the Financial Services Act 2012 and including as applied by the Payment Services Regulations 2017 requires regulators to publish a CBA of proposed rules

- Proposed new rules and guidance build on existing regulatory frameworks
- Asked 1,562 firms to estimate the costs and benefits of implementing and operating the proposed policy framework relative to their firm
- Drew randomised samples from each of the large, medium and small firm populations
- Assessed the one-off and ongoing/annual costs arising from each of the elements of the proposed framework including compliance costs
- Implementation costs:
    - Time and resources spent by firms familiarising themselves with the proposals and performing a gap analysis to identify necessary changes as a result. Would expect these costs to be a one-off and reasonably small in comparison to other costs arising from these proposals.
    - Firms are expected to invest resources in people, processes, technology, facilities and information to ensure continuity, quick recoverability of their business services and contingency plans.
    - Firms expected to change/revise their internal processes – may incur recruitment costs
- IT costs
    - Acknowledge that some firms will need to make adjustments to their IT systems e.g. adjust for enhancing monitoring
    - Investment in cybersecurity defences
    - Ongoing maintenance costs that would require firms to stay within the impact tolerances. FCA do not think that firms will need to have a significant upgrade of their IT systems on an ongoing basis, over and above the existing maintenance.
    - Costs relating to purchase/renting of hardware, staff, project management, programming, design and analysis
    - FCA expect the one-off IT costs faced by large firms to average £347.8k, medium firms to average £127.5k and by PI/RAISP/EMI firms to average £12.9k. Ongoing annual costs should be less than the one-off costs but still to be significant.
- Training costs
    - Expect firms to incur training costs to ensure that the policy framework is implemented, maintained, revised and tested on an ongoing basis.
    - Expect one-off training costs faced by large firms to average £69.7k, medium firms to average £16.7k and by PI/RAISP/EMI firms to average £5k. Ongoing annual costs should be less than the one-off costs but still to be significant.

    - For firms who do not have in house training available, they would incur the costs of purchasing training courses from external providers.
- Indirect impacts
    - Acknowledge that increased compliance costs will increase firms' operating costs
    - May be additional costs for retail and wholesale consumers as they may be subject to price increases if firms seek to pass on the costs
    - Increased compliance costs could have indirect effects on the market e.g. increased barriers to entry and expansion and possibly have an impact on innovation, competition and choice for consumers
    - Based on estimating costs provided by firms, consider that these additional costs are likely to be manageable for firms as 'the overall increase in costs per firm is modest and is proportional to a firm's size' and do not expect these proposals to impact innovation, prices across the sectors or to act as a significant barrier to entry

BENEFITS

- Identifying important business services and the impact which disruption to them will have on consumers and market integrity will help firms to prioritise changes/investment to mitigate the risk of disruption
- Set and remaining within impact tolerances will cause firms to move away from a traditional risk management approach, towards treating disruption as inevitable – firms will assess their systems and processes and make changes where these are not sufficiently robust
- Conducting mapping will help firms to understand the resource and support requirements of these services and ensure that these requirements are met. Will stimulate proactive identification of vulnerabilities and as such allow firms to improve their systems and process to mitigate the vulnerabilities identified.
- By testing against severe but plausible scenarios, firms will identify points of failure or weaknesses in a safe manner, allowing them to take action to improve their systems and processes before disruption to their important business services actually occurs.
- Self-assessment document will ensure boards understand their responsibilities and act on them, improving oversight of operational resilience in the firm and equipped with this, firms will be able to make better-informed strategic, operational and investment decisions to improve their operational resilience.
- **Benefits for consumers, firms and the wider economy**
    - Improvements made will allow firms to react faster and more effectively when their important business services are disrupted, thereby reducing the number of consumers affected and lessening the impact
    - Reduced severity and length of disruption will reduce the financial harm, caused to consumers as well as to the firm itself. Indirectly, these reductions in harm will also improve confidence in financial markets and consumer participation.
    - These interventions will allow firms to identify firms to identify ways in which they can avoid disruption altogether e.g. by resolving issues around single points of failure. Avoiding disruption will lessen harm to consumers as well as reduce the significant financial cost to firms including resources spent on recovery and redress and any fines imposed.
    - By considering impact tolerances and assessing their systems and processes, firms are likely to be able to provide better customer service to their consumers in the event of operational disruption as they will be more prepared. May also help mitigate any reputational costs to firm.
    - Building up the operational resilience of firms across financial markets will improve the resilience of the wider financial system and the economy as a whole by reducing the likelihood of major incidents and market disruptions. By reducing the frequency, severity and duration of disruptions to important business services, financial services will become more reliable.

Estimating benefits

- Recognise that estimating and quantifying benefits these proposals are designed to achieve is difficult and in some instances they have not attempted to quantify benefits because they believe that the scale of such benefits cannot be reliably estimated.
- Given the uncertainty involved in predicting the severity and frequency of disruptive events in the future, FCA have used incidents similar in significance and magnitude to events that have already happened in the UK financial markets as the best available proxy.
- Fines imposed range from hundreds of thousands to millions e.g. most severe case in 2018 was over £330m
- Estimating direct benefits to firms from data provided by 306 firms on their estimated cost of disruptions to the services provided to their consumers in the last 5 years
- Will not capture the cost of lost access to financial services and psychological distress resulting from disruption, except to the extent that this has resulted in redress being paid to consumers. Nor will it capture benefits to the stability of financial markets and to the wider economy.
- The disruptions identified and quantified by firms varied considerably in nature and scale, they included cloud service connectivity problems, delays in executing payments to third parties, service upgrade or migration problems, power outages, malicious attacks on their servers, and more. The cost of incidents ranged from hundred to tens of millions of pounds.
  - Of 306 respondents, 87 identified at least 1 incident in the last 5 years that led to quantifiable costs to their business (totalling £96.4m)
  - A total of 108 individual incidents were reported to us, accounting for £68.2m of the total costs of £96.4m identified and with an average costs per incident of £631.5k
- Compared the evidence of the cost of disruptions against the total costs we expect to the industry as a whole over a 5 year horizon to illustrate how many incidents would need to be avoided for these proposals to be net beneficial
  - Using an average incident cost of £631.5k and assuming no further benefit of the proposals beyond the direct costs avoided by firms, the proposals would be net beneficial if they led to the avoidance of around 530 incidents per year or if they reduced the severity of a proportionately high number of such events.
  - The number of incidents was calculated as the break-even point using a 5 year Net Present Value with a discount rate of 3.5% in line with our approach to CBAs.
  - In practice, far fewer incidents would need to be avoided for the proposals to be net beneficial including all expected benefits identified, but hard to be precise.
  - Taking the major disruption that occurred in 2018 with a total cost of around £330m, the proposals would be net beneficial if they led to the avoidance of around 1 such event per year or if they reduced the severity of a proportionately high number of such events.
- These numbers are illustrative of the break-even point if the assumed avoided cost of disruption were the only benefit of our proposals.
- FCA believe that the benefits of the proposals will actually be delivered in the form of a combination of **avoidable costs** e.g. regulatory fines, costs of operational disruptions as well as in the form of continued access, avoided psychological distress and benefits to the stability of the financial system and wider economy that they have not been able to quantify.
- Believe proposals will be net beneficial in the short to medium term.

Questions

Q1: do you agree with our proposal for firms to identify their important business services? If not, please explain why.

Q2: Do you agree with our proposed guidance on identifying important business services? Are there any other factors for firms to consider?

Q3: Do you agree with our proposals for firms to set impact tolerances? If not, please explain why.

Q4: Do you agree that duration (time) should always be used as 1 of the metrics in setting impact tolerances? Are there any other metrics that should also be mandatory?

Q5: Do you agree with our proposal for dual-regulated firms to set up to 2 impact tolerances and solo-regulated firms to set 1 impact tolerance per important business service?

Q6: Do you have any comments on our proposed transitional arrangements?

Q7: Do you agree with out proposed approach to mapping? If not, please explain why.

Q8: Do you agree with our proposed approach to testing? If not, please explain why.

Q9: Do you agree with our proposals for communication plans? If not, please explain why.

Q10: Do you have any comments on our proposed requirement for a self-assessment document?

Q11: Do you have any comments on the cost benefit analysis?

Q12: Do you have any comments on the examples of existing legislation?