PREPARING FOR AND RESPONDING TO FLOODING

A practical guide for SME business continuity
INTRODUCTION

Flooding is a major threat to business. Small and medium-sized enterprises (SMEs) are particularly vulnerable as they are likely to be less prepared than large companies and have fewer resources to mobilise in response.

This guidance is designed to help you consider how a flood would affect your business and plan across the different stages of a flood event.

Based on interviews with businesses flooded between 2007 and 2015, our research identifies eight areas for you to consider. We highlight the critical issues and related actions that will help you to enhance your resilience through business continuity planning.

Why is business continuity planning important?

We found that SMEs which had considered how to maintain continuity of their operations in the event of a major disruption (business continuity planning) were better able to respond to flooding and minimise the impact on their business and customers. With continuity planning you will know what to do and be able to safeguard your business and reputation.

Businesses unprepared for flooding had a more frantic and stressful experience. A lack of continuity planning might also mean you suffer greater disruption and more material loss than is necessary.

Moreover, being able to provide a continuity of service or operations may enable you to gain new customers.

This guidance draws on the experience of businesses which have been flooded to give you practical insights to assist with your business continuity planning.

We use the words of owners and managers, from businesses just like yours, to illustrate the key learning points which emerged from their flooding experience.
HOW TO USE THIS GUIDANCE

Use this guidance by applying the action points that make most sense for your business circumstances. Not all businesses will undertake all possible actions. The actions outlined require resource in the form of time and/or money. So, do a cost benefit analysis to make the best decision about what is appropriate for you.

When assessing what to do, you should think about two important areas:

1. The likelihood of flood affecting your business

Use your postcode to check if your business is in a flood risk area at, www.gov.uk/flood or telephoning the Environment Agency’s Floodline on 0345 9881188. Your local authority’s website will also have information on flood risk.

2. The impact of any flood event

The impact on your firm will be affected by: your type of business; whether you rely on specialist equipment/premises; and also the level of flood defence/insurance you have.

Consider what are the critical activities which underpin your key products/services and who are your core customers. How long could you afford to be without these before the survival of your business is threatened?

Where the likelihood of a flood and the impact of this are both high, think about implementing more action points.

Where the likelihood of suffering a flood event and the impact is quite low, think carefully about the extent of actions you should take.

Part of business continuity planning is thinking about these issues and making the right assessments, and consequently the best decisions, for your business.
NETWORKS AND CONTACTS - ‘BUSINESS CONTINUITY BUDDIES’

Part of any business continuity process is identifying the resources, contacts and support you can draw on when dealing with a major disruption so as to protect critical activities. Our research found these often proved crucial.

1. What is a Business Continuity Buddy (BCB)?

BCBs are people you can call on to help you maintain continuity of operations in the event of flooding. They are drawn from your business and personal networks.

Suppliers, customers, competitors, trade associations, employees, neighbouring businesses, friends and family are examples of potential BCBs. They can provide different sorts of help, depending upon the relationship and any formal/informal arrangements made as part of your continuity planning.

Explicitly consider your networks and contacts as sources of potential BCBs. This will help you to identify which ones to incorporate into your flood planning. Could you make a mutual assistance arrangement with any of them? Are there any areas for which you need to find additional BCBs? Is there potential to pool resources with BCBs e.g. neighbouring business, to manage resources better?

2. How can our business utilise a BCB network?

We found some businesses had formal arrangements as part of their business continuity planning, while others had identified who they would use for alternative premises or stop-gap production. Both approaches help minimise the degree and duration of any disruption. Which approach would suit your business?

Being able to quickly use your networks and relationships for help was key to effective flood response and recovery for many. In the middle of a flood emergency, thinking about who is best to call and locating contact details is challenging and time consuming. A prepared list of names and numbers could be invaluable.

We’re not a manufacturing operation, it is a people business and, as long as the people are contactable, then the business will continue.

[as part of our continuity planning] we are comfortable in saying [to one of our competitors] ‘ok, here is an arrangement. I have got all this product, can you do it for me?’ and they will produce it.

Part of that business continuity plan is contact numbers. We basically built it from clients who were our clients, so we’d have a skip company, a property management company, the full spectrum we needed to carry out an immediate action plan.

We got the power generator through a person that I know who does cranes and that sort of thing so he put me in contact with somebody.
3. What kind of help can BCBs provide?

BCBs can give practical support e.g. moving equipment and cleaning-up as well as help in getting the resources you need to recover quickly. This may also be a more cost effective approach for businesses with limited means. A mutual assistance agreement with trusted suppliers or competitors can offer similar benefits.

During flooding, everyone is looking for the same kind of things to clean-up and recover so competition can be high.

Continuity planning and a BCB network can help you get a head start.

ACTION LIST

Preparing

- Identify people in your networks who could help with resources for continuity
- Evaluate their potential - link with critical activities needs, type of relationship
- Speak with them to see if they would act as a BCB for you - evaluate any cost implications
- Assess whether you need formal/informal arrangements with your BCBs based on your impact analysis (see page 3)

Responding

- Roughly assess the flood impact and your resource needs for continuity of operations
- Contact relevant BCBs and request assistance

Recovering

- Liaise with BCBs over the time period you are likely to need their support
- Evaluate effectiveness of your BCB network - any gaps, changes needed?
INSURANCE

You may think “we have insurance, we’re covered for flooding”. However, insurance is only one part of your flood risk management. Moreover, owners/managers told us about a number of issues that are vital to consider if insurance is to be as effective as possible for protecting your assets.

1. Is our insurance adequate?

Make sure you are clear about who is responsible for insurance - is it you or your landlord? Is your sum insured adequate?

We found that whilst insurance was an important safety net, it did not cover all costs arising from flood. You may also have a policy excess that you need to cover. Check your policy excess for flood, it may differ from other risks.

The insurance payment may also be less than the market cost of replacing your equipment if it was bought second hand.

Make sure that your insurer is aware of any business continuity plans and flood defences you have in place as it may impact positively on your insurance cover.

2. Can we cope until the insurance pays out?

Business owners often have to cover a financial shortfall from their own cash reserves, even if they are well-protected by insurance. This may be to cover short term additional expenses for clean-up, recovery and costs not provided for in the final insurance settlement.

Settlement may also take some time to finalise, especially if there is business interruption insurance to be considered.
3. Have we got the evidence needed to ensure our claim is dealt with quickly?

Accurate and up-to-date financial information together with stock and inventory records provide a sound basis for substantiating any insurance claim and will help to avoid settlement delay.

You will also need to provide evidence for actions taken and expenditure incurred after a flood.

You might want to consider employing a loss assessor to prepare and negotiate your insurance claim if it is substantial. However, be aware that you will have to bear the cost attached to this.

ACTION LIST

Preparing

☐ What insurances do you need – who is responsible for them?
☐ Is your insurance adequate? Do a cost benefit analysis
☐ Can you take any adaptation/mitigation measures to reduce potential loss? See premises and equipment sections (pages 10-13)
☐ Review key machinery regularly – assess level of cover and replacement sources
☐ Build cash reserve for emergency, if possible

Responding

☐ Notify your insurer/broker urgently
☐ Arrange for early discussion with a loss adjustor or claims manager

Recovering

☐ Agree actions you can proceed with e.g. skip hire, clearing up, spoiled stock disposal etc
☐ Keep methodical records of discussions and actions - written and photographic
☐ Do you wish to employ a loss assessor to protect your interests?
FINANCE

Our research found that flood typically brought additional costs. Whilst you may be able to recover some of these expenses, it could take a while. At the same time, you are trying to maintain continuity of your key operations and service your core customers, all of which requires financial resource.

1. How would flood impact on our business’s finances?

If you cannot operate, or have reduced capacity, your revenue will be affected but bills will still need to be paid.

For smaller businesses, the impact on cash flow can be a particular threat.

What is the minimal amount of money that needs to come into your business to keep it going during a disruption? If you have protected your critical activities and you are able to continue servicing core clients, have you ensured that you also have the capability to bill and receive payments?

You may wish to consider insurance which will cover business interruption costs.

2. Are there any time periods during which our vulnerability to the impact of flood is greater?

If your business is seasonal, what does this mean in terms of increased stock, inventory and larger profit loss? Is the maximum disruption time before the business cannot survive shorter than normal?

There are certain financial touch points for all businesses which can have knock on effects if you are unable to do what is required.

Your continuity plan needs to take this into account when identifying your critical business activities as recent experience shows UK flooding is not confined to one particular time of the year.

3. How would we fund additional costs arising from flooding in the short term?

The businesses that we spoke to told us about additional costs that ranged from mops and mobile phones to key equipment.

Without having thought this through as part of your planning, you might make hasty decisions which increase your longer term overheads.
Part of your continuity plan should include an emergency fund based upon your financial assessment of your short term recovery needs. For some businesses, building this cushion is problematic. If that is the case, more risky approaches include trying to extend credit facilities and/or using personal savings. Be realistic, are these feasible?

**ACTION LIST**

**Preparing**
- Evaluate your current financial situation and your levels of liquidity
- Analyse the financial impact of no/reduced operations - consider your level of risk
- Assess annual outgoings - determine key touch points e.g. tax, insurance, salaries
- Consider insurance as a mitigation tool - including business interruption and loss of profits insurances
- Build/maintain an appropriate level of cash liquidity, if possible

**Responding**
- Contact banks and important creditors
- Arrange availability of funds to cover immediate costs

**Recovering**
- Establish cash flow capabilities as part of critical activities e.g. invoicing
- Liaise with insurers about quick settlement or staged payments

"We had to extend our year end as a business because the documentation simply wasn't there to be able to do it"
"All the VAT, the tax all the lot was lost, it's upstairs but it's all stuck together ... the tax people fined us twice"
"We needed a photocopier really, our printer for proofing and everything and we took on a 5 year lease. ... this was just a case of we've got to be up and running. It was a ridiculous quarterly payment for a photocopier"
"How we survived was purely because my wife and myself had money in the bank and we were able to shove money into the company to keep it going until we recovered ... the banks would only help so much"
"We had to go out and replenish. The bank was very good, ... [the business manager extended our overdraft] and said just do what you've got to do, go and buy what you've got to buy. As it happened, we had some money in the bank, so we were ok"
PREMISES

Key issues regarding premises include who has responsibility for maintenance, repair and insurance. This includes parking, as for some businesses damage to commercial vehicles parked on site increased the degree of disruption to the business.

1. Who has responsibility for installing and maintaining flood defence measures?

Make sure you are clear about who has responsibility for what and consider how your relationship with your landlord might affect your business in the event of a flood. We found that whilst many landlords worked well with their tenants before and after the flood… others made a difficult situation worse.

2. What kind of flood defences should we, or our landlords, consider?

Think about, and discuss with your landlord if relevant, what practical steps could be taken to protect your business premises. In the businesses we spoke to, these steps ranged from bund walls around the property, non-return valves in the sewer pipe, separate heating and electrical circuits on upper floors, raised electrical sockets, flooring, laying plaster board horizontally rather than vertically and sandbags.

Any adaptations made may have a positive impact on your insurance cover.
3. Should we consider alternative premises in the event of a flood?

You should consider what will happen to your business if your premises cannot be used for a period of time. Some businesses prepared for this in their continuity planning and relocated for a period of time.

Others found themselves competing for premises with other businesses; sometimes they were lucky in finding an alternative fairly quickly.

However, alternative premises does mean additional costs in the short term.

**ACTION LIST**

**Preparing**

- Adapt premises with flood protection measures - tenants liaise with landlord
- Make arrangements for use of alternative premises - BCBs are a cost effective mechanism
- Collate up-to-date building information - site plan, hazardous materials storage, cut-off points for utilities
- Review vehicle parking arrangements

**Responding**

- Implement flood protection measures e.g. barriers, sandbags
- If safe, move vehicles to higher ground
- Contact landlord

**Recovering**

- Move (key) operations to alternative premises, if appropriate
- Agree clean-up procedures with insurers and landlord

---

We got the [alternative] premises sorted by 9.00, 9.30 the following morning.

I had two sets of tenants in at the time who were considerably badly affected. Fortunately, the travel agent could relocate almost immediately, there was an empty shop just further down the road and they took a short tenancy on that.

We had to pay a deposit and I think we had to pay a month’s rent upfront straight away.

We had the [alternative] premises sorted by 9.00, 9.30 the following morning.
Businesses can only continue to operate if they have the equipment necessary to produce their goods or services, so you need to carefully consider this issue as part of your continuity planning.

1. What equipment is potentially vulnerable to flooding?

Identify which is your most critical equipment, without which your business cannot operate.

Raising equipment above flood level was one of the key actions taken by businesses which mitigated the immediate impact of a flood and allowed them to get up and running as quickly as possible. Think about what you will be able to move, how quickly and to where. Is it possible to permanently move, or raise, your critical equipment so you know it is protected?

2. What safeguards can we put in place?

If you are reliant on IT, regular backups of information, with off-site storage, can protect your organisation from vital data loss. Know where your server is, and assess its vulnerability to flooding, as part of your continuity planning.

For some firms, sub-contracting work if machinery or equipment was compromised was part of their plan.

After flooding, many reviewed where and how they stored equipment and stock.

The people here lifted all the computer stuff off the floor because we used to keep all our computers on the floor, so all the computers, everything we could lift up onto desks people started to do that. Even our server was on the floor, so that was a major saving for us.

I put the furniture up and anything I could lift up there, tried to get everything out of the way.

Every day we do a disk download, those disks, one copy is kept in the office and the other is kept remotely in a secure place.

None of the computers now are on the floor, we said if this had happened in the middle of the night we would have lost all of our computer system. We have got pallets with our computer systems off the floor whereas they used to be on the floor. Heaters are raised, with a wall mount, with the sockets off the floor. So things have been raised.

Our plan is to become a pseudo factory and then we would just manage our customers product by them bringing it to a fixed location and we would then drop it to a plater of our choice that could be approved on the back of our current quality policies.
3. How can business continuity planning help if the worst happens?

For some businesses the water came so quickly that rescuing equipment was not possible. Before the worst happens, make sure you’ve considered this impact.

For example, old or second hand machinery and equipment is a mainstay of smaller businesses and manufacturers. Sourcing affordable replacements can be difficult and time consuming, delaying getting operations back to normal. A cost benefit analysis will help you determine whether it is worthwhile having spares of some critical equipment or an alternative supply source.

There may also be the opportunity to enhance your equipment and capabilities through using your insurance settlement and some of your own funds.

**ACTION LIST**

**Preparing**
- Identify which equipment underpins your key activities or processes
- Which of this equipment is critical? Prioritise protection and/or spares for these
- Review location of IT servers and computers
- Protect less vital equipment where possible e.g. relocate or raise to above flood level
- Agree sub-contracting/spare capacity utilisation with BCBs

**Responding**
- Move/raise equipment and IT off floor

**Recovering**
- Prioritise repair and replacement of critical equipment
- Sub-contract/utilise BCB capacity to cover essential business
- Consider opportunity to upgrade as part of refurbishment - assess feasibility and cost

So all my stock that was in the bottom of that cupboard, the bottom 15 inches… We lost welders, sanders, everything…

It was old equipment which you can’t just go out and buy new equipment like that, it’s just not there

It enabled us to reinvest in newer modern machinery… to take a technological step up, we now have a lot more automatic equipment
Customers are the foundation of any business. They are the source of the revenue which is central to business survival.

1. Who are our customers?
Identify your most important customers. This may be down to size, strategic importance or reputation. Do you have any contractual obligations, such as delivery schedules or non-performance penalties?

2. What are our customers’ expectations?
You need to understand your customers’ expectations and be confident that you are able to meet these in the event of flooding.

What attributes of your goods/services do your customers value – service, quality, type of goods, accessibility, price? What can you do to maintain these during a major disruption?

So I have to think if my machine breaks down what am I going to do to ensure their [my customers’] continuity of supply. I believe that’s the thing that lays the foundations for future …

We had to stop work and actually find some products from competitors in Germany just to keep supplying our customers, just to maintain a presence in the market.

One or two of our key customers that we might expect to want daily attention, we let them know.

We’ve got probably 3 or 4 critical customers that do account for quite a lot of the turnover.

[Our business] works on a 24 hour cycle. … there is no tolerance in the customer’s expectation of service.

We have 35 customers who are 80% of our turnover.
3. How can we meet our customers’ needs during a flood disruption?

A major challenge is meeting your core customers’ needs at the same as which you are having to deal with being flooded. It may mean having to sub-contract work or use alternative suppliers in order to sustain key customers in the short term.

If you are not able to operate at full capacity, backlogs are one of the impacts of a major disruption. This creates pressure for the business long after the flood water has subsided. How would you resource this?

If you cannot provide the goods or services your customers need, there will be competitors who can.

However, there may also be the opportunity to generate new business… if you have operational business continuity.

ACTION LIST

Preparing

- Regularly review customer base and keep up-to-date contact details
- Identify key customers e.g. size, service level agreements etc.
- Keep a copy of customer information off-site
- Identify alternative suppliers/sub-contractors to use

Responding

- Identify outstanding orders and supplies – any implications for delivery and/or goods receipt?
- Prioritise key customers – use your pre-agreed communication strategy
- Notify alternative suppliers/sub-contractors if needed

Recovering

- Inform broader base of customers, as appropriate, and reassure them
- Notify customers and suppliers if in alternative premises
- Consider any opportunity to gain new customers
COMMUNICATIONS

During a flood event, the businesses that we interviewed told us that communication was critical for effective flood response and recovery. This means being able to send and receive important information, as well as having the right equipment and best methods for communicating with different stakeholders.

1. Who do we need to communicate with?

Receiving up-to-date flood alerts and weather information can increase the amount of time you have to respond to imminent flooding. The Environment Agency provides a flood warning service and the Met Office gives weather updates. There are also many resources through social media.

You need to optimise your time and resources. Prioritise communications with your most important stakeholders. As part of your planning, you will know what needs to be done to maintain critical activities, goods and services and by whom. During response and recovery you have to be able to inform stakeholders such as employees and BCBs of what they need to do. For example, do your employees evacuate, stay at home, help with clean-up or work from another location.

Reduce misinformation, reputation damage and loss of business by contacting customers with a clear and consistent message about what is happening. Target core customers in the first instance.

2. What communications equipment will we need?

Telephone landlines often fail during flooding and IT failure and electricity outage can constrain electronic communications.

Think practically about how you can contact customers, employees and suppliers in this situation. How would you cascade information inside, and outside, of the business? Can your telecomms provider redirect calls to a nominated number? How would your business cope without email or access to business data?

"Two weeks [later] we were getting phone calls and we were saying, 'No, we were never affected'. Oh, such and such said you were, well we weren't..."

"The most important thing was letting people know where we were, that we had moved from there to here. And understand there is going to be a phone line issue and all that kind of stuff. So there was a number of things like that. We did PR and stuff like that..."

"We agreed as soon as we got into the building we would take everything out, one member of our staff would start going through to recover papers and whatever and sort those out. Another group was trying to sort out the IT issues, another group was trying to sort out the client side..."
3. What communication tools should we use with different stakeholders?

As part of your continuity planning you should have decided who has responsibility for certain aspects of your communications e.g. telecomms, IT, customers, suppliers, employees and BCBs.

Identify the right methods for the right jobs at the right time. Important clients may need a phone call from a trusted person. An email (if possible) or letter to your broader customer base may be sufficient. Who should talk to the bank and suppliers? Social media, such as Twitter/Facebook can allow you to reach a broad range of people. Update your website if possible. A sandwich board or banner outside can let people know you’re open for business!

**ACTION LIST**

**Preparing**
- Identify information sources – Environment Agency, Met Office, social media
- Consider what your communications strategy would be for key customers and suppliers
- Keep up-to-date contact details – employees, customers, suppliers, BCBs

**Responding**
- Identify need for additional communications hardware
- Inform employees of what to do
- Communicate with core customers and key suppliers - give a clear and consistent message

**Recovering**
- Establish minimal telecomms capability
- Establish your minimal IT provision needs
- Provide updated contact details to customers and suppliers, if appropriate
- Update key customers and suppliers as appropriate
EMERGENCY GRAB BAG

An emergency grab bag contains resources that you will need in the event of a rapid evacuation, or shelter-in-place situation. However, it can also contain valuable information to help you start recovering your business from flood disruption.

1. Why do we need an emergency grab bag?

Businesses told us how quickly flooding can happen. This might mean that you need to evacuate your building urgently to a place of greater safety or shelter-in-place on a higher level until it is safe to leave.

2. What should we put in our emergency grab bag?

The grab bag should contain all the practical resources that you and/or your employees might need in the event of a flood. It should also contain key information to help you start your recovery process as rapidly as possible. Acting quickly can go some way to minimising the disruption to your business over the longer term.

Potential items for a grab bag:

- Torch (wind-up/battery) or glow sticks
- Radio (wind-up/battery)
- Spare batteries (if appropriate)
- Spare mobile phone
- Mobile phone portable power unit/charger
- First aid kit
- Non-perishable food and water
- Emergency blankets
- Business continuity/flood plan
- Contact lists for staff, customers, suppliers, utilities
- Insurer/broker contact details and policy information
- Premises/site map with utilities cut-off details
- Business continuity buddy (BCB) details
- Waterproof document wallet with note pad and pens/pencils

There was no heat, no light, nothing at all… because it got late people decided that they were sleeping and wanted to bed down on the floor.
3. Where should we store the grab bag?

The grab bags items should be stored in a box or bag which is easily accessible, particularly in the event of an emergency evacuation.

Depending upon the size and layout of your premises, you may wish to have more than one grab bag. There should be a nominated person(s) responsible for the grab bag, including who is to collect it during external or internal evacuation. Make sure you consider what will happen if the nominated person is off-site.

ACTION LIST

Preparing

- Decide what resources would be needed if you/your employees were marooned in your premises due to flooding
- Store emergency grab bag above potential flood level and easily accessible
- Review/update the contents regularly (diarise this task)

Responding

- Person responsible for emergency grab bag takes it and distributes contents
- Business continuity plan/flood plan activated and evacuation procedure followed

Recovering

- Ensure the emergency grab bag is replenished - be clear who is responsible for this
- Reflect on what was useful (or not), what was needed and update the emergency grab bag

Everybody moved upstairs because the water started coming across the road. Everyone else had gone home apart from just a few people who were left here. We put some emergency supplies together, we put some packs of water … a cooking stove, some cuppa soups and stuff like that. A rechargeable radio that we have plugged in and torches and stuff like that. Part of our continuity planning is a grab bag and it’s kept up-to-date. It contains what’s in the tanks, the map of the facility, the address book, our profit and loss and our balance sheet.
THE SESAME PROJECT

The Sesame project investigated different case studies of UK flooding (2007-15) in order to better understand and model the impact that a flood event has upon businesses and develop tools to help businesses become more resilient to future flood events.

Investigators: Graham Coates (Durham University), Dabo Guan (University of East Anglia), Tim Harries (Kingston University), Lindsey McEwen (University of the West of England), Martina McGuinness (University of Sheffield), Nigel Wright (De Montfort University)

Researchers: Sangaralingham Ahilan (University of Leeds), Noel Johnson (University of Sheffield), Chunhui Li (Durham University), David Mendoza-Tinoco (University of East Anglia), Amanda Wragg (University of the West of England)

We gratefully acknowledge the support of the UK’s EPSRC in funding the research from which this guidance is derived. Grant reference: EP/KO12770/1

If you have any queries about any of the information contained in this guidance, or should you wish to request additional copies of the leaflet, please contact Martina McGuinness, Sheffield University Management School (m.mcguinness@sheffield.ac.uk)