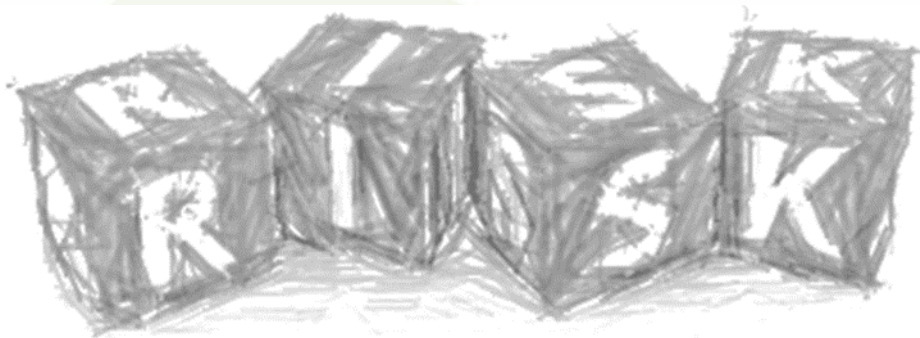


Pacy & Wheatley Construction

Business Continuity And Disaster Recovery Plan



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Introduction

Purpose and Scope of this plan

Disasters, Acts of God and unplanned events can have a devastating effect on any business. It is essential for the purposes of continuity, and to uphold our ability to maintain our promises and deliver our client expectations, that we plan and make allowances for events which may be out of our direct control.

Authority of this Plan

Anthony Wheatley (Managing Director) takes full authority of this plan in the event of emergency. The plan covers all our employees and will be followed comprehensively.

Objectives of this Plan

This Business Continuity Policy has been formulated with much consideration; this allows our company to continue its day to day operations and meet the demands of our customers, clients and stakeholders in any event. This policy is reviewed annually by company director Anthony Wheatley, and it is tested annually to ensure the plans outlined are feasible, realistic and deliver business continuity, which is our ultimate strategy.

Scope of Disasters and Failures Covered by this Plan

The possible crisis and risk factors which could affect our business are listed below; these are monitored and considered individually in further detail:

- IT and Communications services failure
- Power Cut
- Theft and/or vandalism of company property
- Utility failure
- Building Access Restrictions and building loss
- Loss or illness of key staff
- Outbreak of disease or infection

- Fire to premises
- Fuel shortage

Probability and Consequence Reasoning

When analysing the potential for crises which could affect our day to day operations, we look at the probability, frequency and consequences of events which could affect our business and our clients in a negative way. We use a numerical scale to quantify the potential impact of a crisis, and formulate the scale thus:

Probability and possible consequence for each factor is scaled between 1 and 5. The results of both are then multiplied to give an action score which is then analysed. Scores between 1 and 5 are considered to be so small that they are unlikely to occur, and if they did, the consequence would be so minimal that the cost to plan against this occurrence would outweigh the potential cost to rectify the problem should it occur. Scores between 6 and 20 are analysed, planned, and reviewed. Scores of 21+ are considered to have such risk that immediate management attention is required to ensure no disruption to business activity occurs. The 21+ scores (once they have incurred immediate attention, and the risk has been reviewed) then fall into the 6 – 20 bracket, and are reviewed and planned.

Probability, Consequence and Action tables are shown on the following page

	Very Unlikely	Unlikely	Very Possible	Likely	Highly Likely
Probability	1	2	3	4	5

	Minimal	Slight	Moderate	Significant	Severe
Consequence	1	2	3	4	5

	0 to 5	6 to 10	11 to 15	16 to 20	21 to 25
Action	No Action	Plan and Review	Plan and Review	Plan and Review	Immediate Action

Activation of this Plan

The contents of this plan will be put into practice in the event of any deviation from normal activity in any area. The plan will be activated by either Craig Wheatley or Nigel Chambers in Anthony Wheatley's absence.

Disaster and Failure Scenarios

Failure of Pacy & Wheatley's general IT

Applications

Pacy & Wheatley are equipped with the following levels of security amongst the IT infrastructure...

Backup

Pacy & Wheatley solutions currently have full system backups on a 5-day rotation using robust data cartridges. These are also stored in a fireproof safe to keep them protected.

As well as this they have a full data backup in the cloud using Microsoft Azure backup. Modifications to the system are then backed up daily and a 30-day retention is kept.

Shadow Copies

As well as the tape backups they also have shadow copies on the system which is a snapshot of the data at 07:00 and 12:00 every day. This allows us to restore previous versions of files and folders as required.

Anti-Virus

Pacy & Wheatley are protected with anti-virus software (Kaspersky) which is controlled via our central control panel and all updates and fixes are controlled this way too.

Virtualisation for Disaster Recovery

Disaster Management – in terms of IT – is how quickly an organisation can recover from a disaster and what they have in place to aid that recovery.

In terms of Pacy & Wheatley system in case of a potential disaster i.e. fire, flood theft etc., the current downtime that would be experienced until they were fully operational would be a maximum of 1 day.

This is down to the virtualisation of all the servers including the terminal server which houses all the third-party software used. The software used is Windows 2012 r2. This is the process of taking all the information, configuration, policies email settings etc., and storing them on one file in the server.

And as such, this file will then be backed up by the server in its entirety. In the event of a disaster, any server could then be obtained and the file would then be restored, with all configurations working as seamlessly as they did before.

Anti-spam

As Pacy & Wheatley solutions have their email hosted by Microsoft, they use their on-board anti-spam protection, this works in 2 ways...

Connection filtering checks the reputation of the sender before allowing a message to get through. You can create an allow list, or safe sender list, to make sure you receive every message sent to you from a specific IP address or IP address range. You can also create a list of IP addresses from which to block messages, called a block list.

Spam filtering checks for message characteristics consistent with spam. You can change what actions to take on messages identified as spam, and choose whether to filter messages written in specific languages, or sent from specific countries or regions. You can also turn on advanced spam filtering options if you want to pursue an aggressive approach to spam filtering. Additionally, you can configure end-user spam notifications to inform users when messages intended for them were sent to the quarantine instead. (Sending messages to the quarantine is one of the configurable actions.) From these notifications, end users can release false positives and report them to Microsoft for analysis.

Advanced Threat Protection

Microsoft Office 365 Advanced Threat Protection (ATP) is a cloud-based email filtering service that helps protect your organization against unknown malware and viruses by providing robust zero-day protection and includes features to safeguard your organization from harmful links in real time.

No Admin Rights

Each user uses a Windows 10 machine and has no access rights to the system so no software can be downloaded without prior testing and approval from LCS. Once we deem the software safe, we will then assist in installing the software by logging onto said machine and inputting the admin password. No users will know the admin password for security purposes.

Complex Passwords

Each user has their own secure password for logging on to the system and has restrictions on what they can and cannot access to make sure any secure information is not compromised.

IT Support

As well as having these measures in place Pacy & Wheatley have a fully managed support contract with LCS Group Ltd to ensure that the IT infrastructure is up to date, secure and always monitored.

IT and Communications Services Failure

LCS Group, Riverside House, 1 Alexandra Road, Grimsby, DN31 1RD

Telephone: 01472 501234

Email: support@LCSgroup.com

Deltek PIM

You should already have a fully comprehensive backup solution in place for your existing infrastructure and we would always recommend that you apply the same backup policies to your Deltek PIM server as you do all your infrastructure. This information is intended to offer what we feel to be the bare minimum that you should backup up in order to be able to help you recover in a DR situation is and not meant as a detailed DR model;

- SQL Databases (including SQL Server Reporting Services)
 - o Deltek PIM Database
 - o Yellowfin Database (where applicable)
- File Stores
 - o Deltek PIM
 - o Archive Folder (optional module)
- Websites
 - o The Web, XWeb and Workflow directories are critical to restore the functionality of PIM but the whole PIM folder structure should be backed up
- Search
 - o The 'Extracts' folder
 - o The 'Index' folder
- Workflow
 - o The DataStore must be backed up
 - o The Persistent store must be backed up

All Deltek systems are supported and backed up in line with general IT Applications by LCS.

Immerse

Immerse use Norton antivirus to protect us from Malware attacks, ransomware and viruses. Other security protocols we have in place are:

- All traffic transferred via HTTPS
- Built in protection to vector attacks such as SQL injection
- Request throttling mechanisms to prevent brute force attacks
- Token based Cross-Site Request Forgery (CSRF) Protection mechanisms
- HTTP Strict Transport Security (HSTS) to prevent policy that helps to protect app against protocol downgrade attacks and cookie hijacking

- All User bank information encrypted using OpenSSL and the AES-256-CBC cipher. Furthermore, all encrypted values are signed with a message authentication code (MAC) to detect any modifications to the encrypted string
- Immerse currently take 3 backups a day which is stored on Amazons' secure static storage service.

Building Access Restrictions and Building Loss

There is the possibility, that access to the building may be restricted due to adverse weather conditions such as snow and ice. It may also be the case that the use of our office is not possible due to utility failure or fire.

Agreed Strategy

Due to the comprehensive protection provided by our IT consultants, we would not expect any major disruption to our ability to communicate or record data which is relevant to our dealings with clients. Any breakdown in these comprehensive recovery and protection systems would be of a short duration (less than 24hrs) with all client data stored in a secure location. Other forms of communication will be used should urgent and essential dealings be required during this time.

Loss or illness of key staff

Agreed Strategy

In the event that one of our key staff becomes long term ill, ceases to work for the company, is involved in a fatal accident or passes away from natural causes, we will be able to continue and fulfil our contractual obligation through the internal appointment of staff to fulfil roles.

Each replacement member of staff has previously been employed in the role they are expected to cover, and is absolutely capable of undertaking the tasks required of them when undertaking this job role.

In the event that more than one of our key staff is no longer with the company, permanent replacement will be arranged through our agencies and extensive contacts within the industry rather than sub-contractors. Although



we use directly employed staff, in the event of staff shortages we have a range of pre-selected sub-contractors and suppliers for our complete range of business functions.

Outbreak of Disease and/or Infection

Symptoms of any pandemic illnesses are regularly communicated to all employees, who are encouraged to go home and stay at home if they display these symptoms. They are encouraged to return only when they are better. If the individual is not able to leave immediately, they are encouraged to adopt good hygiene practice, and avoid contact with others. Directors and senior managers are able to request that an employee leaves the workplace (if showing serious and obvious symptoms of any pandemic disease which is notifiable and refusing to leave work), if subjectively they feel it is for the good of the individual, and the greater good of all employees.

Good hygiene is encouraged generally, with employees being encouraged to wash their hands, and make use of the tissues and sanitising gel which has been made available to them by the company. Pace and Wheatley does not intend to close for business to prevent outbreak of any currently listed pandemics, nor does it intend to close if employees catch a virus. It is felt that the measures outlined, and effective communication of the seriousness of the virus, will enable the company to fulfil its contractual agreements.

Agreed Strategy

In the event that multiple employees are struck down by a virus at any one time, the company has the ability to continue to provide its services. Numerous employees have shown willingness to work more than 48 hours per week (agreement to be in writing). With no further special measure, this will allow our employees to work 78 hours per week if our situation became critical (11 hours rest p/d x 6 days, + 24 hours uninterrupted rest = 90 hours. 168 hours per week – 90 hours = 78 hours). These arrangements for new working hours will be instigated immediately after it becomes apparent that there may be a shortfall in labour or management resource.

COVID -19

Our main priority is ensuring all staff and people are safe on all our sites and office locations, and that we have in place robust and suitable control measures.

To be able to do this we need to work as a team with our supply partners, ensuring communication levels give mutual trust and confidence for all. Close contact is required with line managers to work together through this difficult time.

As main contractors we are urged to open up clear communication channels to all suppliers on their contracts and projects and provide regular updates, ensuring payments to supply chain are up to date and set out the position over any suspension of any work

We are constantly reviewing our working arrangements:

- 1 Job roles that are able to work from home (Head Office), most people can now access all systems they need remotely.
- 2 Head Office staff should take home laptop daily and anything else needed, in case self-isolation is required (Please be mindful of sensitive data and security)
- 3 Our offices are remaining open – though we will constantly review this, updated will be provided. However, no more visitors should come to our offices. There will be signage to this effect.
- 4 We ask that meetings are held online remotely and minimise travel where possible. If similar outcomes can be achieved by doing business virtually/ on the phone. Microsoft Teams has been set up and should be used, which is embedded within our current system.

All staff are requested to inform line managers without delay of any underlying health conditions, or any individual concerns.

Regular updates shall be provided, where changes have been made they will be highlighted. If there are any concerns in relation to attending site or/ office, exercise caution and consider self isolation. Keep following the most basic but important advice which is to wash your hands.

P&W Group site procedures – COVID 19

- 1 All site personnel and Visitors to wash hands immediately upon arrival, or return to site.
- 2 P&W appointed operative to wipe all common surfaces within site accommodation each morning
 - a. Door handles
 - b. Kettle handles
 - c. Fridge handles
 - d. Water Boiler taps
 - e. Table tops
 - f. Back of chair tops
 - g. Light switches
 - h. Heater controls
 - i. Other surfaces - as seen as sensible precautions
- 3 Avoid shaking hands, use elbow's.
- 4 Cover your mouth and nose with a tissue or your sleeve (not your hands) when you cough or sneeze and put the tissue in a bin and then wash your hands.
- 5 Wash hands regularly with soap and water for at least 20 seconds.
- 6 Do not touch your eyes, nose or mouth if your hands are not clean.
- 7 If anyone display symptoms, please make Site Manager aware. Site Manager to investigate and follow Government guidance current at the time & inform head office of any and all cases on site immediately.
- 8 Report all absences due to self-isolation (even subcontractors) to head office – so we have a record.

Stay Safe Together!!!!

Fuel Shortage

Disruption to our fuel supply could occur for a number of reasons:

- Scarcity of supply
- Technical problems with the fuel infrastructure
- Industrial action / public protest

In the event of any of the above, the situation could be worsened by panic buying. A worst case scenario is that petrol stations and commercial supplies could be exhausted within 48 hours of an incident, and it could take up to 10 days before stock levels are fully restored.



Agreed Strategy

If a fuel shortage occurs, we shall be able to fulfil our contractual obligations, through adherence to the following measures:

- Reduction of our organisation's dependency on fuel
- Car sharing will be encouraged and used, to reduce the need for fuel use
- Reducing fuel usage
- Non-essential journeys will be cancelled to enable us to fulfil our essential services
- Improving the resilience of company supply chains
- A quota of diesel that enables the running of company transport has been arranged with a plant hire supplier in the event of fuel shortages
- Reallocating resources to deliver only key products and services
- Effective communication with staff, customers, suppliers and other key stake holders in advance of, and during a major fuel disruption
- The company will communicate at all times with its project stakeholders, regarding its planned activities

To reiterate, the company does not expect any major disruption to supplies within the next year, but has the capacity to cope should this occur.

Testing the Business Continuity Plan

Updating and Review of the Business Continuity Plan

It is essential that the business continuity plan is tested at least annually, to ensure the plan is effective and fulfils its reason for existence. Pacy & Wheatley undertakes periodic testing of the plan, with particular focus on the possibility of IT and communications failure. This is conducted in conjunction LCS. and has thus far found the systems we have in place suitable and sufficient. Two tests of our systems will take place this calendar year, focusing again on IT and communications, but also on the effect of a fuel shortage in the current climate. Director Anthony Wheatley will decide when these tests will take place; they will not be made known to staff before they are announced with immediate effect. The results of these tests will be measured, to ensure that business continuity is maintained, and that contractual obligations to our clients, customers and subcontractors are fulfilled.

The Business Continuity Plan will be reviewed after each test set out on page 10. Findings will be analysed, and improvements made should the plan be found to be lacking in any way. This will be a continuous process, with the company's written policy being updated annually as and when is necessary.

Review Date - Continuous review by the management team



Signed by Company Director: Anthony Wheatley

Date of Review: **17/03/2020**

Date of Next Review: **17/03/2021**