

VERMEG



| TO ACCELERATE DIGITAL TRANSFORMATION

VERMEG

COVID-19 Business Continuity Plan - report

March 2020

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I. Business Continuity Plan Introduction

1.1 Introduction

Business Continuity Plan focuses on sustaining the organisation's functions, during, and after an incident for a specified period of time.

This Business Continuity Plan (BCP) addresses a return to Business-As-Usual and covers interim requirements to continue operations immediately following the incident.

Resource information (Human Resources, Hardware, Application requirements, etc) contained in this Business Continuity Plan are vital to the continuation of services and the subsequent Continuity and commencement of services.

This BCP has been written for the possibility that a less experienced team member may be delegated the responsibility of activating the plan. As such there are clear and definitive steps outlined to ensure continuation or speedy continuation of key business processes

1.2 Business continuity plan sequences

Business Continuity Plan covers five main phases:

- **Pre-incident planning:**
Definition and establishment of the target operating model (structure, evaluation criteria, escalation criteria...) to respond to an incident or a crisis
- **Emergency Management plan:**
when an operational or hazard risk arises
Focusing on safeguarding people, assets and environment
- **Crisis & incident management plan:**
Managing the issue and implication for the organisation (strategies perspective, stakeholders management...)
- **Business continuity plan:**
Focusing on fast stabilisation and recovery of critical process
- **Post incident / crisis:**
Claims processing, BCP update & testing

1.3 VERMEG Business Continuity Plan

This Business Continuity Plan (BCP) is concerned with the business and operational responsibilities of VERMEG. Those responsibilities include VERMEG management and the following departments: InfoSec, ITS, HR, Finance, Products, R&D & Logistics.

1.4 BCP objectives

The aim of this BCP is to ensure that in the event of a loss of or interruption to departments of VERMEG, the following actions will occur:

- Critical departments, applications and virtual machines are recovered depending on the priority order

- Critical resources required to support a recovery have been identified
- Predetermined processes for the notification of interruptions (incident / crisis) are clearly defined and properly used
- Agreed parameters for BCP activation are clearly defined and properly used
- Predetermined structures for the management of a response to an interruption clearly defined & implemented
- Additional contingency documentations are identified and referenced
- Recovery strategies to support the retrieval of critical functions are implemented

1.5 BCP scope

This BCP serves to provide guidance to VERMEG management during an interruption of various departments that are longer than tolerable. This document is intended to assist with an efficient and coordinated response to any significant incidents / crisis and to minimise any potential impacts on VERMEG.

Significant incidents / crisis can be generally defined as those incidents which, if not processed within a specified period of time, would have a serious impact on:

- Finances
- Image and reputation
- Legal and compliance issues
- Clients and staff
- Ability to perform essential services

1.6 VERMEG COVID-19 BCP specific context

The coronavirus pandemic (COVID-19) is an ongoing global pandemic disease leading to severe acute respiratory syndrome. The virus first emerged in Wuhan, China, in December 2019. On 11 March 2020, the World Health Organization declared the outbreak as a pandemic situation.

Over than 126,000 cases have been confirmed in more than 110 countries and territories, with major outbreaks in mainland China, Italy, South Korea, and Iran.

The virus spreads between people in a way similar to influenza, via respiratory droplets from coughing. The time between exposure and symptom onset is typically five days but may range from two to fourteen days.

In accordance to worldwide public health responses and as a response to the fast spreading pandemic, VERMEG launched a specific BCP including health awareness communication, travel restrictions, work from home plan and several actions to prevent site quarantines. Deloitte consultant was involved by VERMEG to support the monitoring of the action plan implementation.

II. VERMEG COVID-19 BCP

2.1 Planning, Context and Assumptions

This BCP has been developed within the context that:

- One or more site has been affected by Coronavirus
- Sites, office & Systems Unusable (quarantine or power loss)
- Staff Unavailable (quarantine)

This plan assumes that COVID-19 have affected part or all, of VERMEG sites. An entire quarantine of key staff and/or suppliers or contractors have been considered.

VERMEG has a separate BCP strategies. The impact and the tolerance to the interruption has been taken into consideration when determining priorities and continuity strategies.

This report assumes that Maximum Acceptable Outage, BCP notification, activation, & escalation procedures, BCP team Roles and responsibilities, contact lists and floor plans are currently kept and can be made available either on or off site at the time of an interruption.

2.2 Safety & Health awareness:

In order to increase safety and health awareness among all worldwide staff, VERMEG launched a safety plan, including:

- Equip all VERMEG buildings with laser thermometer to identify suspicious cases before entering VERMEG common spaces. For this purpose, multiple training session are delivered among security agent to raise awareness as first safety barrier, on how to qualify and treat suspicious situation and thermometer operating instructions
- Increase in cleaning and disinfection operations of common spaces, taking into consideration the World Health Organisation (WHO) recommendations on highly suggested sanitary products
- Installation of hydroalcoholic gel stations in strategic points and employees crossing point (Buildings entry, open spaces, rest spaces...)
- Lunch of a daily health awareness mailing campaigns targeting all VERMEG employees and presenting updates on worldwide health situation, a reminder of safety precautions, list of recommended numbers to contact in case of suspicious cases and travel policies & restrictions. For this purpose, a specific SharePoint was developed to archive all COVID-19 communication and to allow employees accessing essential information at any time and regardless of their position
- Multiplication of preventive displays (WHO posters) across strategic crossing points (elevators, building entries ...) and digital displays by updating screensavers for computers and meeting rooms across the entire network
- Organisation of health awareness session delivered by labour doctor, consisting of a brief presentation of COVID-19 situation and symptom, a brief of highly recommended preventive action and a Q&A session
- Nomination of international referent responsible of identify and report on the current situation and guide local staff in case of emergency

2.3 Travel security and restriction:

In order to prevent cases of imported contamination, several actions have been considered:

- Restriction of business meetings as travel (international and national) are limited to strictly necessary business meetings and conducting conference calls meeting when possible
- Daily update of the list of restricted and prohibited countries for traveling or stopover
- Implementation of an automated mailing system for traveling employees, presenting safety instructions, VERMEG focal points contacts and travel procedures
- In order to ensure employees safety during business trips, a preventive stock of “FFP2 hygienic mask” has been built up and made available to traveling employees

2.4 Key employees:

In case of one or more site affected by Coronavirus scenario or that sites and office are unusable for quarantine or power loss, the BCME team of VERMEG has set up a proper action plan, covering:

- The list of the delegates for Vermeg’s Executive Committee members was reviewed and updated
- HR has established the list of key members in all departments, in the different sites, then defined their interims
- A list of crucial employees composed by IT and logistics staff that must work on site from premises, has been identified to operate the data centre in case of site inaccessibility. Several flats in a radius of less than 2 Km have been rented, and made available for those employees in case of BCP activation in order to facilitate sites accessibility
- The possibility to set-up a white office, a decontaminate office with pre-configured workstation and safety & health package (hydroalcoholic gel, mask and gloves) is under investigation to allow key employees working and operating from a safer office in case of BCP activation
- Testing of power generators: In full capacity (power supply to data centres and offices), the power generator can operate for a total period of 72h without interruption. In case of half capacity (power supply dedicated to data centre), power generator can length for an estimate period of one week
- In order to prevent a continuous loss of power, an additional stock of gasoline has been provided to increase power generator operating time to an estimated period of 2 weeks

2.5 Educate the market:

As one of Software editors leaders, we consider that VERMEG must play a key role in sustaining the market and supporting its suppliers in the preparation of their own BCPs, allowing them to operate in times of crisis:

- A brief of Covid-19 BCP was shared within VERMEG top suppliers, in order ensure that best practices are spread across the value chain
- Encourage VERMEG top suppliers to establish their own BCP to prevent any delivery interruption in case of Covid-19 outbreak in the upcoming period

2.6 Work from Home (WFH):

Vermeg Information Security Steering committee has established crisis management team to deal with coronavirus risks for business continuity mainly for Vermeg R&D site in Shanghai, furthermore, for the other Vermeg sites like Hong Kong and Singapore.

The WFH alternative was initially launched to be evaluated and tested for Vermeg Shanghai site in January 2020.

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Then, due to the spreading of the coronavirus, the Shanghai government made an announcement that all companies in Shanghai will remain to be closed until 9th February 2020. Announcing that the earliest day that Vermeg Shanghai will be open is Monday, 10th February 2020 depending on further development of the control of the disease.

Before that announcement, Vermeg was ready, the recovery modes considered in the BCP for this situation was "distance working" & "nomad" (i.e. "nomad" mode is the persons concerned have a laptop and keep it in their possession (possibly also a mobile phone)).

The commitment with Customers for releases delivery were reviewed and prioritized, Vermeg guaranteed that all the projects that the Shanghai staff were involved in, were on track.

The technical solutions deployed for the business continuity of Shanghai staff were: VPN and Virtual Desktop Infrastructure (VDI).

Taking benefits from the successful WFH of Shanghai site, Vermeg has decided to exploit this lesson learned and anticipated the readiness for all other sites in USA, Europe, APAC and Tunisia early, Therefore, Vermeg launched multiple actions which have been implemented in order to allow employees operate and deliver our clients, in case of site inaccessibility and activation of work from home plan:

- A stock of additional laptops has been provided to prevent any stock limitation during the upcoming period as we forecast that IT components will be a scarce resource due to China economic downturn
- A VPN client has been installed and configured into all VERMEG laptops to allow our staff working from any location in case of resources relocation
- For the need, multiple surveys have been shared within VERMEG network to assess our staff capacity to work and deliver from home:
 - Assess our staff accessibility to establish home connection using WI-FI, mobile hotspot or 3G/4G devices
 - Assess our staff readiness to use VPN client
 - Update our primary and secondary phone numbers data base to ensure all staff availability in case of BCP activation
- **VERMEG VPN Stress Test:** Multiple stress test have been conducted with all VERMEG offices between February 28th and March 11th:
 - **Tunis offices 1st stress test** on February 28th: a stress test regrouping a local team of 35 employees was conducted on Friday 28/02/2020 to assess their capacity to operate from home using VPN client: Overall, the test demonstrated positive results allowing the BCP team to identify improvement action as all test participants were able to connect to VPN client despite some faced trouble

The test allowed our IT team to identify a standard WI-FI modem configuration preventing any incompatibility with ISP services and VPN client. Besides a data bundle injection for critical resources has been prepared in case of BCP activation to prevent any loss, perturbation or connection slowdown while working from home

- **Tunis offices 2nd Stress test** on March 4th: a second test with a broader scope including approx. 25% of Tunisia staff has been conducted to confirm our staff capacity to work from home and assess our VPN bandwidth capacity to support multiple connection over a working day. For this purpose, a request of VPN bandwidth increase for a total period of 3 months has been made to our ISP provider

Overall 96% of participants were able to connect and deliver their critical work over the working day. A special IT taskforce was dedicated during the test day to support participants overcoming any connection issues or slowdown.

Based on test day results, we estimate that: all the Tunisian Staff can operate critical work from home using VPN client and that our VPN bandwidth capacity can support simultaneous connection without perturbation. As a mitigation plan in case of BCP activation, all internet bandwidth will be reserved and allocated to our VPN connection

- **UK Office Stress Test** on March 4th: a stress test regrouping all UK staff was conducted on March 4th to assess UK staff capacity to operate from home using VPN client and VPN bandwidth capacity to support simultaneous connection of all UK staff: Overall the test was conclusive as all employees were able to operate using the VPN client and no incident has been reported to the IT support time
- **Singapore, US & Europe Office Stress Test** on 11th & 12th March: Simultaneous, work from home stress test took place in Singapore, Europe & US offices to validate staff capacity to operate from home. Overall, tests were conclusive as all employees were able to operate using the VPN client, no significant incident has been reported to the IT support department and the VPN bandwidth was able to support multiple connection with no major incident to report
- In case of inaccessibility, all customer support telephone numbers have been automatically configured to be redirected to the customer support team leader professional phone

2.7 Virtual Machine (VM):

In order to reinforce VERMEG back-up strategy for critical and non-critical virtual machine, further actions have been taken on BCP decisions:

- Update Critical Vs Non-Critical VM lists
- Reinforce the Critical VM strategy
- **Critical VM transfer tests:** several tests have been conducted to evaluate and estimate IT team capacity (volume and time) to transfer critical VM and their back-up from a major data center to another data center or a cloud in case of site inaccessibility or power loss. Based on test results a maximum allowable outage of 2 hours to 3,5 hours is to be considered in case of transferring a critical VM

III. VERMEG BCP key contacts

3.1 BCP Executive Committee

Name	Title
Badreddine OUALI	Chairman & CEO
Marwan HANIFEH	Vice Chairman
Mousser JERBI	Chief Operating Officer
Kawther ZOUARI	Chief Finance Officer

3.2 BCP Management Team

Name	Title
Adel LOUDHABACHI	Information Security Manager
Khaled KTATA	Global ITS Director
Adel KALLEL	IT Manager
Rym CHOUKATLI	Head of communication
Selma ZINE	Human Capital Director
Dhouha MHISSEN	Admin and compensation Manager
Laura CAMERON	Product & Business representative
Fayez TEKITEK	R&D representative
Sleheddine HMADI	Finance & Logistic Director

3.3 BCP Country Managers

Name	Country
Fergal LEONARD	USA
Joseph KUBEYKA	Singapore, Hong Kong and Australia
Yiqun GU	China
Paul THOMAS	UK
Fathy TRABELSI	Continental Europe
Miguel DANCKERS	Belgium
Paul MASSART	Spain
Juan GOMEZ REUS	Mexico
Wagner ANTUNES	Brazil
Mousser JERBI	Tunisia