

Covid19 Business Continuity Plan – VERMEG report

December 2023

VERMEG



1. Context - Crisis Context



BCP trigger

- ✓ The coronavirus pandemic (Covid-19) is a global pandemic disease caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2).
- ✓ **December 2019:** The virus was first identified during an outbreak in Wuhan, China.
- ✓ **First weeks of 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.
- ✓ In accordance to worldwide public health responses and as a response to the fast-spreading pandemic, VERMEG launched a specific covid-19 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.



Agenda

1. Context
2. BCP synthesis & timeline
3. Covid-19 BCP Action Plan
4. BRP strategy
5. VERMEG BCP key contacts

1. Context - Organizational Context

Starting date

February 6th, 2020 (*Ongoing covid-19 BCP to monitor the pandemic and control risks of resurging and similar cases ...*)

Organizers

Internal	External
BCP Management Team	Deloitte

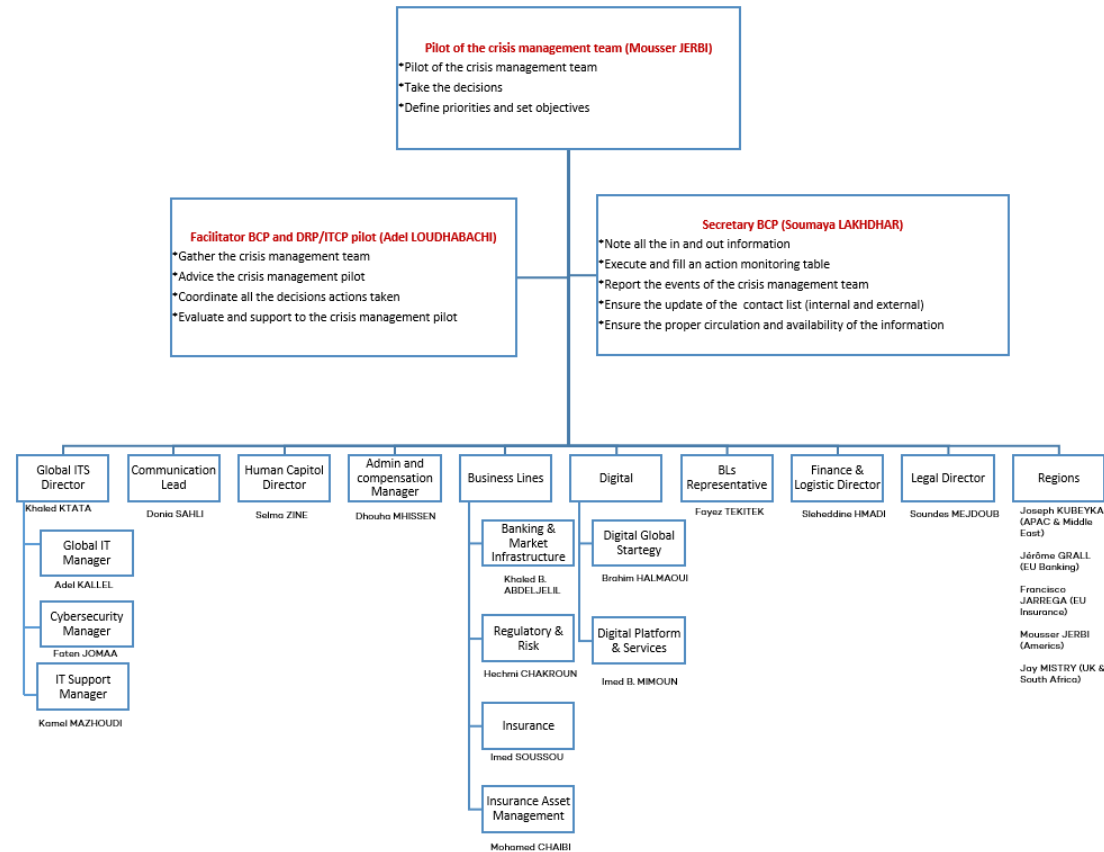
Main objectives

- ✓ 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. Context - VERMEG Crisis Management Team

Crisis management team

Members of the Crisis Management Team



1. Context - Risk Assessment

Possible scenarios

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

Progress of situation

The virus first emerged in Wuhan, China, in **December 2019**.

On **11 March 2020**, the WHO declared the outbreak as a pandemic situation.

During the first weeks of 2020, over 126,000 cases have been confirmed in more than 110 countries and territories.

VERMEG launched a specific BCP including health awareness communication, travel restrictions, WFH plan and several actions to prevent site quarantines.

VERMEG is continually monitoring the health situation in order to mitigate and risks of virus resurfacing

Stakeholders

Internal	External
<ul style="list-style-type: none">• Employees• General Management• Other Vermeg services	<ul style="list-style-type: none">• Clients• Media



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2. Synthesis & timeline

BCP launch

Covid-19 Business Continuity – February 6th, 2020. (Ongoing covid-19 BCP to monitor the pandemic and control risks of resurging and similar cases)

Scope

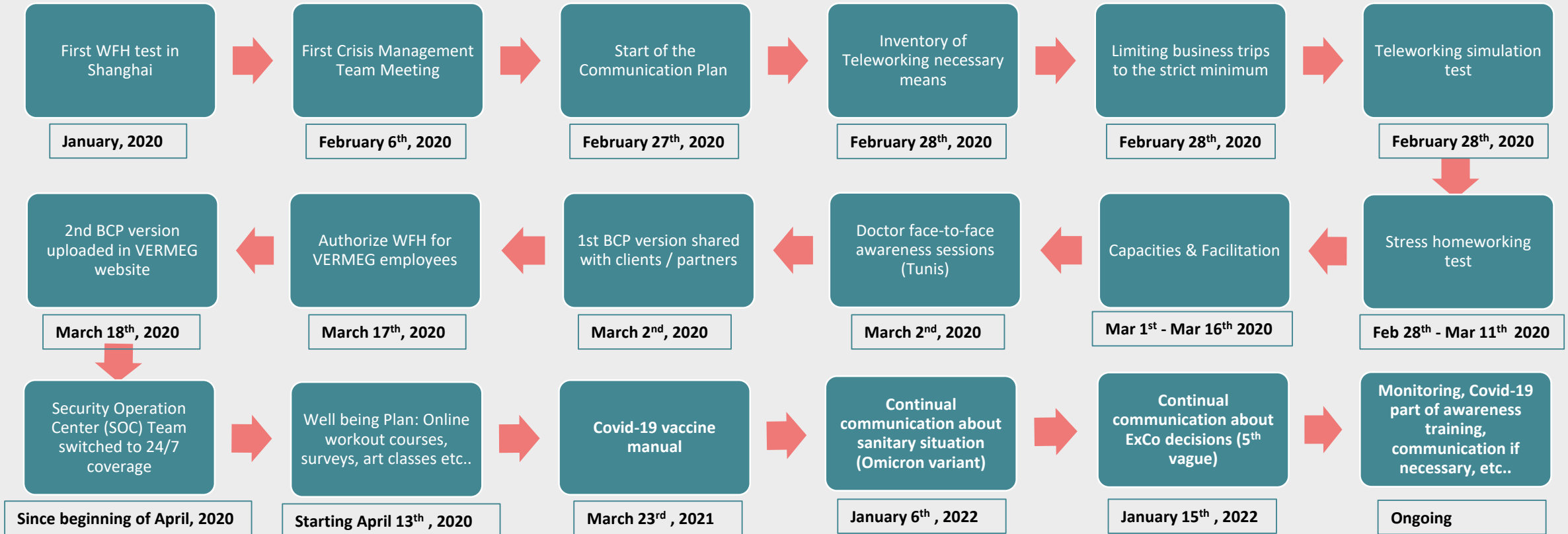
This report serves to provide guidance to VERMEG management during an interruption of various departments that are longer than tolerable. It covers the impact of a global pandemic on the health & well being of personnel, on the market (including communication), on the working methods and on the technical aspects.

Assumptions

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.

2. Synthesis & timeline





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3. Covid-19 BCP

Health & Safety

Objective

In order to increase safety and health awareness among all worldwide staff, VERMEG launched a safety plan (**Top priority:** [Action taken since February 2020](#))

Actions

- ✓ Equip all VERMEG buildings with laser thermometer to identify suspicious cases before entering premises 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 Organization (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...)
- ✓ Air-conditioning systems has been temporary stopped in some VERMEG's buildings to stop eventual propagation of the microbes/bacteria's & viruses
- ✓ 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

3. Action Plan

Awareness & communication

Awareness

- ✓ Employees that have flu, cold, ... symptoms were asked to not come to the office and to work from home until fully recovered (action taken since February 2020)
- ✓ 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 COVID19 communication and to allow employees accessing essential information at any time and regardless of their position
- ✓ Organization of health awareness session delivered by labor 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



3. Action Plan

Business trips



Travel security

- ✓ Restriction of business meetings as travel (international and national) are limited to strictly necessary ([action taken since February 2020](#))
- ✓ 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



3. Action Plan

Human Resources Management



Key employees

- ✓ The list of the delegates for VERMEG's Executive Committee members was reviewed and updated. (action taken since February 2020)
- ✓ 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 center 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 centers 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 center), 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.



3. Action Plan

Suppliers & Thirdparties Management



Educate the market

- ✓ 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.
- ✓ Dates of emails / customer and partner correspondence
 - | 1st BCP version shared with clients / partners: **2nd March**
 - | 2nd BCP version uploaded in VERMEG website : **18th March**
- ✓ In case of inaccessibility, all customer support telephone numbers have been automatically configured to be redirected to the customer support team leader professional phone

3. Action Plan

Work From Home (WFH)

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](#).
- ✓ 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.

3. Action Plan

WFH Technical Readiness (1/7)

Objective

- ✓ The technical solutions deployed for the business continuity of Shanghai staff were: VPN and Virtual Desktop Infrastructure (VDI), [January 2020](#).
- ✓ 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:

IT stock management

- ✓ 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:
 - I Assess our staff accessibility to establish home connection using WI-FI, mobile hotspot or 3G/4G devices
 - I Assess our staff readiness to use VPN client
 - I Update our primary and secondary phone numbers data base to ensure all staff availability in case of BCP activation

3. Action Plan

WFH Technical Readiness (2/7)

VPN stress test

Multiple stress test have been conducted with all VERMEG offices between [February 28th](#) and [March 11th](#):

Tunis offices 1st stress test

Exercise

- ✓ [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

Results

- ✓ 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

3. Action Plan

WFH Technical Readiness (3/7)

Tunis offices 2nd stress test

Exercise

- ✓ **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

Results

- ✓ 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

3. Action Plan

WFH Technical Readiness (4/7)

UK office stress test

Exercise

- ✓ **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

Results

- ✓ 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

3. Action Plan

WFH Technical Readiness (5/7)

Singapore, USA & Europe offices stress test

Exercise

- ✓ **11th & 12th March:** Simultaneous, work from home stress test took place in Singapore, Europe & US offices to validate staff capacity to operate from home.

Results

- ✓ 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 .

3. Action Plan

WFH Technical Readiness (6/7)

Capacities & facilitation

- ✓ Data bundle Injection ([which started on 16/03](#)) to allow employees with ADSL problems to use 4G.
- ✓ Creation of a specific Telework category in our Support system + focus on these tickets: [01/03](#).
- ✓ Collection and update of primary & secondary phone numbers of all TN employees to be reachable under any circumstances.
- ✓ Launch of a mobile VUX application for self-service support: [02/03](#).
- ✓ Acquisition of a LogMeIn Rescue tool to facilitate Remote Support: [04/03](#).
- ✓ Call forward test option for all customer support teams (for continuous reception of telework calls): [04/03](#)

Communication tools

Communication tools were implemented to facilitate the work of collaborators

- ✓ WebEx, Teams and Jabber tools are used /monitored in daily basis.
- ✓ Sharepoint, collecting all useful information (travel policies, contact by country, preventive measures, figures, etc.), with a daily update

3. Action Plan

WFH Technical Readiness (7/7)

Starting dates of
100% WFH by
country

Country	Starting date
• VERMEG Shanghai	• 27th January, 2020
• VERMEG Singapore	• 20th January, 2020
• VERMEG Hong Kong	• 20th January, 2020
• VERMEG Australia	• <i>(WFH already)</i>
• VERMEG Brazil	• 16th March, 2020
• VERMEG Mexico	• 19th March, 2020
• VERMEG Spain	• 11th March, 2020
• VERMEG Luxemburg	• 13th March, 2020
• VERMEG France	• 13th March, 2020
• VERMEG Belgium	• 13th March, 2020
• VERMEG USA	• 12th March, 2020
• VERMEG Tunisia	• 17th March, 2020

3. Action Plan

Cybersecurity adopted to WFH

Cybersecurity

In order to reinforce VERMEG cybersecurity during Covid-19 confinement risky period, some actions have been taken. (action taken since April 2020)

- ✓ Enforce the MFA (Multi-Factor Authentication) by boosting the verification each 5 days instead of 15 days. (This means that MFA will request VERMEG employees to reintroduce the PIN code, that they will receive by SMS or on their Mobile Authenticator Application, every 5 days).
- ✓ Force the MFA in case of unusual sign-in detected (unfamiliar location, impossible travel).
- ✓ ATP Antiphishing reinforcement: Regular check of phishing emails received and block sender/domain addresses.
- ✓ (VERMEG also rely on its employee vigilance: they must not open suspicious emails or click on suspicious links. And report immediately any suspicion to InfoSec Team).
- ✓ Trigger a Backup review exercise to better classify VERMEG VM criticality and make sure that all important VMs are well backed up.
- ✓ Security Operation Center (SOC) Team switched to 24/7 coverage starting from April 2020.
- ✓ Require all VERMEG Cybersecurity experts' partners to obtain the necessary authorizations for driving during mandatory lockdown (7 partners), in case their support is needed.
- ✓ Communication to use OneDrive: All VERMEG employees must use OneDrive to store their files/Data existing in their computers.
- ✓ Dedicated Pentest by external third-party related to WFH mode is planned to be performed.



3. Action Plan

Backup strategy (1/2)

**Virtual machines
(VMs)**

In order to reinforce VERMEG back-up strategy for critical and non-critical virtual machine, further actions have been taken on BCP decisions. (action taken since February 2020)

- ✓ 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.

3. Action Plan

Backup strategy (2/2)

Disaster recovery (RTO & RPO)

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

- ✓ **RPO: (Recovery Point Objective):** point to which information used by an activity must be restored to enable the activity to operate on resumption.
- ✓ **RTO: (Recovery Time Objective):** period of time following an incident within which product or service must be resumed, or activity must be resumed, or resources must be recovered.
- ✓ According to VERMEG BCP, time frames set to resume activities and recover data are established. The recovery times guarantee the service levels defined in the established SLAs. A list has been defined detailing the RPO and RTO metrics which ensure the continuity of the different activities depending on the applications used for corresponding activities.
- ✓ Considering the average thresholds limits, below are the target durations:
The target duration of the RPO can vary between 4 hours and 7 days.
The target duration of the RTO can vary between 30 minutes and 24 hours.
- ✓ These durations are defined according to the type of applications assigned to each service / product.

3. Action Plan

Employee wellbeing

Objective

In order to ensure the wellbeing among the employees during the pandemic and while working from home, VERMEG launched a wellbeing plan.

Actions

- ✓ Regular communication proposing tips for staying healthy and productive whilst working from home.
- ✓ 20th of April 2020: Online workout courses are offered to all colleagues, to allow them to have a physical activity at their homes.
- ✓ 13th of April 2020: Work from home survey to take the pulse of employees' well-being since the lockdown.
- ✓ 27th January 2021: Launch of painting and drawing classes for all employees.
- ✓ March 2021: Launch of Yoga Courses for all employees
- ✓ May 2021: Launch of cinema club by Vermegians
- ✓ May 2021: Launch of music courses for employees



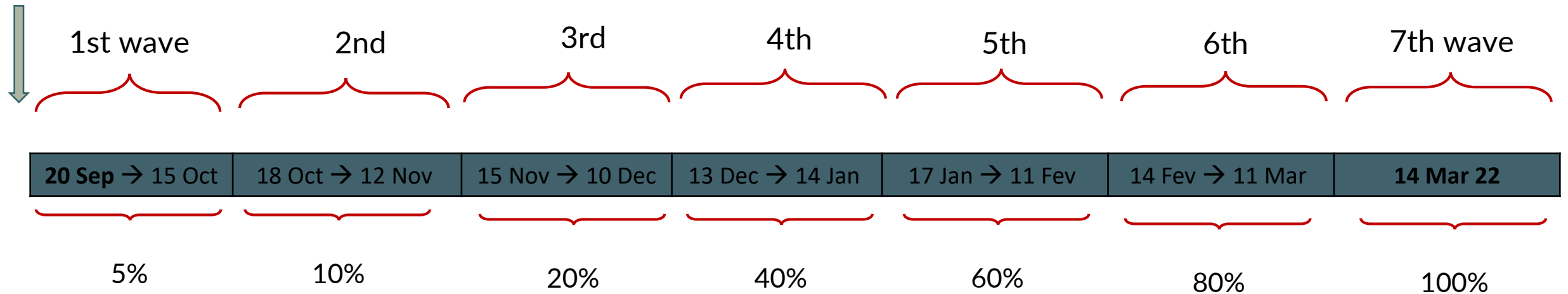
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Return on-site timeline schedule

BR D-Day for Tunisia :
20th Sep 21

The % refers to employees authorized to work on-site :
However, with teams rotation obligation and Flex Office concept



Wave (1) → Wave (3), based on:

- **Unfavorable WFH conditions:** Inconvenient work space, too many distractions at home, psychological situation
- **Spontaneous demand** from the employee

Wave (4) → Wave (5), based on:

- **Customer/business demand :** Activities have been identified as benefiting most from being at the office
- **Integration / onboarding needs:** New joiners, ...etc.

Wave (6) → wave (7), based on:

- **Generalization**

P.S. Maximum 50% will be on-site at the same time (i.e. Teleworking concept will be maintained even after the pandemic termination 3d on site / 2d WFH)

Resumption plan guidelines



1. Managers will define their lists upon their knowledges of their team members WFH situation
2. High risk / vulnerable people have to be exempted from the early waves (Managers to be informed by their team members)
3. Attendance must be alternated within the same project, in order to limit the risk of cross-infection for the same activity
4. Key personnel and their backups must not be present on site at the same time, mainly during 2021 waves
5. Prioritize for the early waves the individuals not dependent on public transport
6. Before generalization waves : Authorize, but not oblige the return for those who are not volunteer. BRP Vermeg's position before generalization: "If you can work from home, do so !"
7. Vermeg will not mandate the vaccination for the authorized employees, however, the full respect of covid-19 barrier gesture and social distancing remain mandatory in Vermeg premises
8. Reusable / washable masks will be distributed for employees in Vermeg office (i.e. 6 per each employee)
9. Prior coming to the office, the authorized employee have to book his/her desk via **FlexOffice Netisse** application
10. "Stop & Go" strategy : Vermeg will adapt the planning based on the pandemic situation (i.e. Rollback possibilities in case of sanitary situation deterioration)



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4. VERMEG BCP key contacts (1/2)

BCP Executive Committee

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

BCP Management Team

Name	Title
Adel LOUDHABACHI	Chief Information Security Officer
Khaled KTATA	Global ITS Director
Adel KALLEL	IT Manager
Kamel MAZHOUDI	IT Support Manager
Faten JOMAA	Cybersecurity Manager
Mounir HBAILI	Communication Officer
Selma ZINE	Human Capital Director
Dhouha MHISSSEN	Admin and compensation Manager
Mousser JERBI	Product & Business representative (acting)
Fayez TEKITEK	R&D representative
Sleheddine HMADI	Finance & Logistic Director
Miguel DANCKERS	Legal Director
Soundes MEJDOUB	Legal Director

4. VERMEG BCP key contacts (2/2)

BCP Country Managers

Name	Country
Mousser JERBI	USA, UK Country Manager (acting)
Joseph KUBEYKA	Singapore, Hong Kong and Australia Country Manager
Marwan HANIFEH	Continental Europe, Belgium / Luxemburg , Spain, Country Manager (acting)
Khaled BEN ABDELJALIL	Mexico Country Manager (acting)
Wagner ANTUNES	Brazil Country Manager
Mousser JERBI	Tunisia Country Manager



VERMEG

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