

Manual on Vital Records Protection



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Manual on Vital Records Protection

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I. INTRODUCTION

1.1 Scope of the publication

1.1.1 The availability of records is critical to the operation and maintenance of government functions. Thus proper protection of the most important records (vital records) to the government should be included as part of the emergency preparedness responsibility (contingency planning) of bureaux and departments (B/Ds).

1.1.2 This publication defines vital records, explains the importance of vital records protection, identifies common hazards to records, provides guidelines on the selection of vital records and choice of appropriate protection methods, and enumerates the steps in establishing a vital records protection programme.

1.1.3 A comprehensive vital records protection programme will help a B/D to:

- a. determine the most critical business activities which must be carried out during and immediately after an emergency or disaster;
- b. identify the records which contain essential information needed to support such critical business activities, resume their normal operation, and protect the legal and financial rights of the government as well as those of individuals and organisations directly affected; and
- c. develop and implement proper policies and procedures to protect its vital records.

1.1.4 It should be noted that the possibilities for emergencies and disasters are endless but the means of protection is limited. The vital records protection programme detailed in this publication can be expected to use the limited means to protect against some disasters and emergencies, and to lessen the damage in the case of their occurrence. It does not serve to eliminate all crisis situations.

1.1.5 When a disaster does occur, to mitigate loss, it is important to respond quickly with appropriate records salvage and recovery actions which are, however, beyond the scope of this publication. Interested parties may seek advice and assistance from:

Curator (Preservation Service)
Government Records Service

5/F., Hong Kong Public Records Building
13 Tsui Ping Road, Kwun Tong
Kowloon

Tel : 2195 7808
Fax : 2142 5759
Email : psinfo@grs.gov.hk

1.2 Further guidance and assistance

1.2.1 The Government Records Service (GRS) provides leadership, advice and assistance in records management for all B/Ds. As regards vital records protection, advisory, microfilming and training are available. B/Ds are encouraged to contact GRS for further details.

II. VITAL RECORDS PROTECTION PROGRAMME

2.1 *What are emergency and disaster?*

2.1.1 An emergency is defined as a situation or an occurrence of a serious nature developed suddenly or unexpectedly that demands immediate action. There may generally be an interruption of normal operation of short duration and it does not necessarily require significant efforts to control it. Examples of emergency include power fluctuations causing corruption or loss of computer data, leaking pipes dripping water onto files or vermin nesting in and devouring records, etc.

2.1.2 A disaster is an unexpected occurrence which inflicts widespread destruction and distress and has long-term adverse effect on the operation of an organisation. Long-term adverse effect may be interpreted differently by different organisation in relation to its most critical functions/activities. Examples of disasters may include earthquake, serious rainstorm and flood, major fire and explosion, hazardous material spill, plague, war, sabotage, etc.

2.2 *A records/information disaster*

2.2.1 While emergencies and disasters may affect an organisation in many different ways such as deaths of personnel or loss of money and capital, a **records/information disaster** addresses specifically the segment that affects the availability of the needed records essential to the survival and continued operation of the organisation.

2.3 *What are vital records?*

2.3.1 In the government context, vital records are defined as those records containing information essential to the survival and continued operation of a B/D in the event of an emergency or a disaster. They should be identified and properly protected because of the information they contain and/or their being the evidence of particular business function/transaction. In short, these records are required to:

- deal with emergencies/disasters;
- continue/resume operation of the B/D;
- protect/re-establish legal, financial and functional status; and
- preserve the rights of the B/D, its employees and clients as well as members of the public.

2.3.2 The status of vital records does not necessarily relate to their other attributes such as physical format, media, stage of life or security grading. Vital records may exist in any format or medium (paper-based documents, photographic materials, or electronic files on magnetic/optical media); they may be active or inactive; classified or unclassified; and of permanent or short-term value.

2.4 *Why vital records protection?*

2.4.1 Disasters and emergencies, whether natural or man-made, may strike a B/D at any time without warning. Their adverse consequences increase for those who do not prepare for predictable contingencies.

2.4.2 The reasons for vital records protection are obvious. They are to reduce the risks of records disasters, ensure that a B/D has adequate information to survive and resume operation during and after a disaster as well as to limit the extent of damage and loss.

2.4.3 Vital records and information generally represent only a small portion, say 1-5%, of all records and information maintained by a B/D. Without these records, however, in the event of an emergency or a disaster, operation of a B/D could not be continued and the public interest would be endangered because of:

- disruption of efficiency due to the lack or gaps in information;
- breaks in the continuity of operation;
- vulnerability to litigation; and
- exposure to the unplanned expenses of financial settlements or loss of revenue.

2.5 *Benefits of vital records protection*

2.5.1 Insurance is a means we use to protect ourselves from loss arising from the happening of emergency or disaster. The identification and protection of vital records is a way to mitigate records disasters. It constitutes a quasi-insurance policy against the disruption of critical government operation.

2.5.2 The benefits of a properly implemented vital records protection programme are summarised as follows:

- a. reduce risks of avoidable disaster;

- b. improve information security;
- c. increase ability to manage crisis situation and reduce danger of paralysis due to shock factors;
- d. mitigate loss and damage in the event of a disaster;
- e. protect vital assets effectively and cost-effectively; and
- f. ensure compliance with laws and regulations.

2.5.3 The importance of vital records protection is perhaps more fully appreciated by those who have experienced losses from fires, floods, computer disasters or vandalism. It, however, makes good management sense for B/Ds to protect vital records to assure that operation, people and assets survive the impact of a disastrous event without costly disruption.

2.6 *Programme elements*

2.6.1 Simply put, a vital records protection programme is the application of records management principles and techniques to identify and protect vital records of a B/D.

2.6.2 The programme should consist of preventive steps and action responses to potential and real disasters. While such a programme is often tailored to the goal, management style, size, information needs, resources and physical locations of individual organisations, it should contain the following elements:

- a. analysis of potential disasters and hazards that need to be addressed;
- b. establishment of preventive and recovery procedures to identify, protect, restore and update vital records;
- c. availability of suitable equipment, supplies and services for records protection, recovery and restoration;
- d. a work plan indicating when and how the programme is to be activated;
- e. designation of programme responsibilities;
- f. staff training; and
- g. programme testing, updating and revision.

2.7 *Conditions for programme success*

2.7.1 To be successful, a vital records protection programme must satisfy these conditions:

- a. strong support and commitment from senior management are obtained;
- b. programme objectives and responsibilities are clearly defined across the B/D;
- c. those records vital to the continuation of critical business functions have been identified and protected in accordance with accepted records management practices;
- d. the vital records can be accessed, collected or reconstructed in an acceptable amount of time to resume business operation as and when required; and
- e. programme procedures are properly documented and consistently reviewed and updated.

2.7.2 To evaluate the effectiveness of your vital records protection programme, B/Ds are encouraged to complete the checklist as given in paragraph 7.6.1 on a scheduled basis to ensure the measures are complete.

III. ESTABLISHING A VITAL RECORDS PROTECTION PROGRAMME

3.1 *Steps for programme establishment*

3.1.1 A well thought through vital records protection programme is worthless if it remains in a binder or on someone's bookshelf. Benefits of the programme can be realised only when it is properly implemented. The following are the suggested steps to organise and implement the programme in your B/D:

- a. obtain management support and commitment for the programme;
- b. formalise the programme by designating personnel for programme planning and coordination;
- c. conduct risk analysis/assessment;
- d. identify vital records and prepare vital records schedules;
- e. determine records protection methods;
- f. draw up vital records schedules for each of identified vital records series;
- g. arrange for building modification and maintenance improvement;
- h. establish procedures to select, protect and update vital records;
- i. prepare or identify sources of supplies, equipment and services for records protection and recovery;
- j. assign detailed programme responsibilities to ensure that vital records are properly maintained in usable and retrievable conditions as and when needed; and
- k. conduct staff training as well as programme testing and revision.

3.2 *Designation of responsibilities*

3.2.1 It is understood that no management issues can be addressed by an organisation without someone being held responsible and accountable. Therefore, establishment of a vital records protection programme should start with senior management's appointment of the Vital Records Coordinator with assigned responsibility and authority for protection of vital records in the B/D.

3.2.2 The Vital Records Coordinator serves a very critical function. It involves working with other concerned officers throughout the B/D to identify,

inventory, protect, store, update and make accessible copies of the vital records whenever required. Officers responsible for the departmental records management function such as the Departmental Records Managers or their designated deputies are recommended to take up this task.

3.2.3 As protection of vital records usually involves different divisions/sections, B/Ds may consider setting up a vital records committee for better coordination and cooperation among concerned parties.

3.2.4 While the membership of the committee depends largely upon the size and administrative organisation of the B/D, it is important that the nominated members should be of full acquaintance with the functions/activities and records of their B/D.

3.2.5 To formalise the vital records protection programme and facilitate its implementation, B/Ds should issue a circular to announce the establishment of the vital records protection programme and the designation of responsibilities. The circular should acknowledge the importance of protecting vital records, spell out the programme objectives and authority assignment, and solicit the cooperation of all personnel. The circular should be re-circulated at yearly intervals. A sample of the circular is shown at **Appendix A**.

3.3 *Risk analysis/assessment*

3.3.1 Risk analysis or assessment is an effective tool to help B/Ds determine the extent of protection and select the appropriate and cost-effective protection methods. A thorough risk analysis can also ensure that B/Ds will not overprotect their vital records from risks that are unlikely to occur.

3.3.2 Basically a risk analysis should determine the following:

- a. types and nature of potential emergencies or disasters that B/Ds may encounter;
- b. acceptable level of each type of risks;
- c. possible impacts (tangible and intangible) of risks on operation of B/Ds;
- d. the varying possibility and intensity of each risk which vital records are subject to. Such risks may include:
 - fires;
 - typhoons;
 - earthquakes;

- leaking pipes and flash floods;
 - explosions caused by chemicals stored at the premises or contained in its operating systems;
 - power shorts and fluctuations causing loss of computer data;
 - loss of computer network;
 - computer viruses;
 - infestation by vermin or other pests;
 - unauthorised access, theft and purposeful sabotage;
 - terrorism and civil disturbances; and
 - employee negligence.
- e. adequacy of existing measures and maintenance.

3.4 *Know your records storage*

3.4.1 To come with a realistic assessment of the potential risks, it is helpful to know more about the history, layout, flaws and potential problems of the premises where records are stored.

3.4.2 B/Ds should closely examine the exterior and interior of their building for potential risks. The following should be considered in conducting a building/site inspection:

- age of the building and previous damage, if any;
- condition of the roof;
- state of electrical wiring and outlets;
- presence of effective fire detection and suppression system;
- location and condition of water pipes, drains and windows;
- proximity to fire services; and
- hazards from neighbouring facilities such as dangerous chemical stores.

3.4.3 As to those B/Ds who share building accommodation with others, they may have difficulties in assessing and controlling the potential risks and may carry higher risk than others. In that case, it is important that full cooperation of other users of the building should be sought as far as possible.

3.4.4 A sample of a site inspection survey form for assessing general risks to records is at **Appendix B**.

3.5 *Risk assessment approaches*

3.5.1 In conducting risk analysis, B/Ds may adopt qualitative and/or quantitative approaches.

3.5.2 **Qualitative approach** is intuitive and relatively informal. It is particularly useful for identifying and categorising physical security problems and other vulnerabilities. It relies principally upon the following:

- a. physical survey of locations where the records are stored;
- b. examination of security procedures and records/information retrieval and reference patterns; and
- c. interviews and discussions with officers responsible for the identified critical business functions and activities, building, facilities and equipment security, emergency coordination and records management.

3.5.3 **Quantitative approach** is a more scientific method to conduct risk assessment. On top of site inspections, interviews and discussions, it employs numeric calculations to estimate the likelihood and impact of losing the vital records. The formula is:

$$R = P \times C$$

Where

R = *risk* associated with the loss of vital records translated into money terms;

P = *probability* that such a threat will occur in any given year. Likelihood of such an occurrence is mainly based on available historical data and projection; and

C = estimated *cost* of the loss if the threat occurs. It usually refers to the costs, time and difficulties to replace or reconstruct the records so that they can be used to continue/resume operations.

3.5.4 Result of these calculations is the probable annual dollar loss that B/Ds would experience when the information contained in the vital records is lost. An example is given below for illustration:

The estimated cost (C) of replacing the system and reconstructing the operation records relating to an automated information system of the Public Records Office (PRO) is \$350,000. Given that the probability (P) of losing the records is once in every five years (i.e. $P = 1 \div 5 = 0.2$), the probable annual dollar loss (R) would be \$70,000 (i.e. $\$350,000 \times 0.2$).

3.5.5 To determine whether the investment for protecting the system design and operation records is justified, PRO should balance the cost of protecting this records series against its probable annual dollar loss. If the annual protection cost is less than \$70,000, the investment is justified.

3.5.6 Quantitative approach is basically a probability estimate. It is useful in defining protection priorities for vital records and making decisions as to whether or not protection is justifiable. However, for those irreplaceable vital records, quantitative approach is not applicable since the risk of their loss is unacceptable to the B/Ds.

3.5.7 A sample form for conducting risk assessment is given at **Appendix C**.

3.5.8 According to the result of risk assessment, B/Ds should proceed to identify their vital records and select appropriate protection methods, which are to be discussed in detail in Chapter IV and Chapter V.

IV. SELECTION OF VITAL RECORDS

4.1 *Vital records identification*

4.1.1 The most difficult aspect in developing a vital records protection programme is to determine what records/information will be required during and immediately after an emergency or a disaster.

4.1.2 Vital records are specific to each B/D. It is the unique functions and responsibilities of each B/D that determine what is vital to its operation.

4.1.3 While commercial organisations may view vital records protection mainly from the aspect of survival, the government should have a broader perspective to ensure both survival and the ability to govern during and immediately after an emergency or a disaster.

4.2 *Categories of vital records*

4.2.1 Except for those B/Ds that are responsible for emergency services, vital records normally add up to about 1-5% of the records holdings of a B/D.

4.2.2 If records are created on a need basis, strictly speaking, all of them are important in one way or another. As it is impractical to protect all records to the same extent, priority must be assigned to what should be protected and how they should be protected.

4.2.3 Vital records are commonly categorised as essential, important and useful.

4.2.4 **Essential records** are emergency operating records for conducting emergency services that are required to be on-site or in close vicinity. Records more likely to be selected as essential records are given below:

- a. emergency plans and directives;
- b. rescue plans and resources;
- c. emergencies facilities of hospitals and welfare centres, etc.;
- d. building plans, details of building and utility systems including operational manuals;
- e. emergency staffing assignments, including lists of key personnel, along with their addresses and telephone numbers, assigned to emergency duties;

- f. data on radiological equipment including operating processes, protection and preventive measures;
- g. records vital to public order, health and safety;
- h. vital records schedules describing the records series and system documentation of electronic information systems (if any); and
- i. master lists of vital records schedules or indexes which give the subject, year, file reference and any necessary data of each vital record that facilitate information retrieval.

4.2.5 The above are of course not exhaustive and should be taken as illustration only.

4.2.6 **Important records** are records which document legal status, and protect financial assets and ownership of the government that are required to re-establish functions and responsibilities. Some of them are irreplaceable while others may be reconstructed with considerable time, efforts and costs. Examples of important records are given below:

- a. legislation and related government documents;
- b. contracts, agreements and records relating to entitlements and obligations;
- c. revenue records;
- d. insurance and investment records;
- e. property and land records;
- f. lease and deeds records;
- g. organisation charts and statements of duties;
- h. valuable research data and findings;
- i. procedural manuals;
- j. records relating to major decisions and plans; and
- k. system description and other documentation for any automated/ electronic information systems designed to maintain the above records.

4.2.7 **Useful records** are records which document the basic rights and claims of individuals, corporate bodies and members of the public. Examples of records that are more likely to be selected as useful records are given below:

- a. payroll and leave records;

- b. retirement and pension records;
- c. copies of agreement between government and companies;
- d. records relating to patents and trademarks;
- e. citizenship and immigration records;
- f. social security and adoption records; and
- g. system description and other documentation for any automated/electronic information systems designed to maintain the above records.

4.3 *General selection criteria*

4.3.1 The process of the selection of vital records must be very selective. For the protection programme to be cost-effective, only the information that is absolutely vital to B/Ds should be protected. The following are some general selection criteria:

- a. choose only those absolutely needed records without which your B/D will collapse or are unable to function, and exclude those merely desirable to keep;
- b. choose records which are irreplaceable or are very costly and time consuming to replace/reconstruct;
- c. if the needed information exists in more than one record source/format, choose the most concise form of records available;
- d. information in the records should be complete, concise and easy to understand;
- e. finding aids and indexes to records chosen should also be treated as part of the vital records to facilitate prompt records retrieval as and when required;
- f. all records, regardless of their stage of life (i.e. active, inactive and permanent records) should be appraised; and
- g. verify whether duplicate, parallel or summary records exist within or outside your B/D and if such records are properly protected to avoid duplicate efforts.^(Note)

^(Note) Duplicate records bear the exact content of the original records though they may be in a different physical format(s); parallel records are not exact duplicates of the original records but contain the major information required; and summary records contain brief and essential points of the original records.

4.4 *The selection process*

4.4.1 Identification of vital records starts with thorough understanding of the functions/activities that are essential to critical business functions of B/Ds. It is a judgmental process and is best accomplished through the cooperation of senior management representing key functional areas, subject experts, records managers, legal advisors, financial controllers, human resources managers and security officers as appropriate.

4.4.2 There is no single or standard vital records selection scheme that caters for all circumstances. Different B/Ds will have their unique needs and requirements, and each of them has to define what records are vital to its survival and continued operation. B/Ds may take the following steps to determine what their vital records are and their priority of protection:

- a. conduct a thorough organisational analysis to identify and determine business functions/activities that are essential to the primary missions of your B/D;
- b. review statutory and regulatory responsibilities of your B/D in order to determine the operational, legal and financial requirements and obligations and the related records;
- c. consult with the officer(s) responsible for security and emergency coordination in your B/D and review related documentation to identify potential disasters and assess level of risks;
- d. review records classification systems, records inventories/schedules and other related documentation of your B/D to determine which records series contain information necessary to carry out or resume each identified vital function/activity;
- e. determine the extent to which loss or damage of these records/records series would delay or prevent critical business activities; and
- f. assess the time, costs and difficulties involved in replacing or reconstructing such records/records series.

4.5 *Records survey and vital records schedules*

4.5.1 Records survey is the most effective way to identify vital records series of a B/D. Essential information concerning records series is to be collected during the records survey. Apart from the physical and intellectual description of the records series, the survey should also identify the reasons for

protection and the supporting documents which aid information reconstruction in case the records are lost or destroyed. By analysing the survey result and making reference to the identified essential functions and activities of a B/D, vital records will be identified.

4.5.2 During the survey, essential information of a vital records series should be collected and recorded in a vital records schedule. Vital records schedule is not only a tool to establish proper protection methods and practices, but also forms an integral part of the vital records of the B/D. Therefore, it is important for B/D to develop proper measures to protect this documentation.

4.5.3 Essential data to be recorded in a vital records schedule should include the following:

- a. programme authority responsible for maintaining and protecting the vital records series;
- b. title and contents of each vital records series as well as information about the related records indexes;
- c. storage medium on which original and protection copies of the vital records are recorded;
- d. volume of the records and space required to house them;
- e. locations of the original and protection copies of the series;
- f. methods of protection and special protection instructions;
- g. frequency with which the records are to be updated;
- h. records retention and disposal requirements; and
- i. effective date of the schedule.

4.5.4 B/Ds are encouraged to use the Vital Records Schedule developed by GRS at **Appendix D** to record the essential information of their vital records.

4.5.5 It should be noted that paper vital records should be grouped and inventoried by series whereas electronic records are often inventoried by information system.

4.5.6 The vital records schedule for electronic records should include information on the hardware, system and application software, technical and procedural documentation, data sets and files, hardcopy and softcopy of inputs, indexes and output as well as the processing files for information integrity and protection of the essential contextual relationships of different components in the information system.

4.6 *Master list of vital records schedules*

4.6.1 As with records disposal and retention schedules, the easiest approach to maintain vital records schedules is to create a database and print out an integrated master list for the vital records schedules. The master list of the schedules provides each division/section of a B/D with a complete list of all vital records series for which it is responsible. The master list should contain **description** of vital records to be protected and **specific instructions** for storing and updating copies of those records, which are extracted from the vital records schedules. A sample of the master list of the vital records schedule is given at **Appendix E**.

V. SELECTION OF PROTECTION METHODS

5.1 *Vital records protection*

5.1.1 After vital records are identified, B/Ds must then decide how to protect them. Several methods such as dispersal, duplication, on-site storage and off-site storage are commonly applied in protecting and preserving vital records and they may be used in combination.

5.1.2 In addition, appropriate equipment and proper environmental conditions should be provided, particularly for fragile media such as microfilm and magnetic tapes and disks, to ensure the continued preservation of the vital records (or their designated copy) until they are obsolete or replaced.

5.2 *Dispersal*

5.2.1 Dispersal involves preparing extra copies when the records are created and storing them in location(s) away from the office premises for normal business needs. It is the least expensive method where there is built-in or routine distribution of records containing vital information to other branches or sections within the B/D in the normal course of business.

5.2.2 In the event of the destruction of the records in one place, the B/D would be able to rely on the copy located elsewhere to reconstruct the required information.

5.2.3 However, this method has some limitations. Though dispersal involves the least additional cost, proper procedures must be developed to ensure the scheduled reproduction and the availability and accessibility of the records in case of emergency/disaster. In addition, protecting copies of vital records by transferring them to branches or sections, under the same roof or in proximity, could be equally vulnerable as both the original and the duplicate copies might fall victim to the same disaster or emergency.

5.3 *Duplication*

5.3.1 Duplication, sometimes may be known as planned dispersal, is the distribution of additional copy of records created specifically for protection or back-up purposes.

5.3.2 Duplication may result from the preparation of extra copies of records when they are created, or through microfilming or other copying process at planned intervals. In order to cut down the costs, B/Ds may consider creating the extra copies at the point of records creation. If extra copies cannot be made during creation of records, provisions for reproduction should be made on an on-going basis. Moreover, B/Ds should also set up appropriate procedures to ensure that copies of such records are always kept current.

5.3.3 If a vital record is to be duplicated on any medium other than paper, it is important to make sure that the equipment to retrieve, read and reproduce the record is readily available.

5.4 *Microfilming and Government Microfilm Centre*

5.4.1 For duplication of limited quantity of records after the creation stage, photocopy reproduction is the more economical way. When records volume is large (e.g. 2 linear metres or more) and the records retention period is longer than 7 years, B/Ds may use microfilming to produce duplicates of their vital records.

5.4.2 As far as protection of vital records is concerned, preserving records on microform (such as microfilm and microfiche) is often adopted to maintain a master microfilm which is to be kept safe from hazards and to produce duplicates for general use. Where production capabilities, sufficient environmental control and microform reading equipment are available, microfilming can provide the safest and most economical protection for vital records.

5.4.3 GRS operates a centralised microfilming facility - Government Microfilm Centre (GMC). GMC is tasked with providing quality service-wide microfilming-related services, including filming vital records, to B/Ds. For details of GMC services, B/Ds may contact:

Assistant Curator (Preservation Reprographic Service)
Government Records Service
5/F., Hong Kong Public Records Building
13 Tsui Ping Road, Kwun Tong
Kowloon
Tel : 2195 7803
Fax : 2142 5759
Email : psinfo@grs.gov.hk

5.5 *Format/medium considerations*

5.5.1 Copies of vital records may be in any formats/media, such as paper, electronic and microform. Duplicating records in the same medium (i.e. paper to paper, microfilm to microfilm, electronic to electronic) often provides the most economical and least complicated method of protecting vital information.

5.5.2 In deciding which storage media to maintain copies of their vital records, B/Ds should consider the following:

- a. implications for media formatting in the contexts of authenticity and legal admissibility of the records;
- b. availability of appropriate information retrieval facilities and equipment (i.e. microfilm readers/printers, computer hardware and application software) during an emergency. B/Ds should note that some categories of vital records, such as those relating to public safety, may be required to be available in a usable form that does not rely on special equipment; and
- c. availability of suitable environmental control and monitoring facilities (such as temperature and humidity, pollutants and magnetic field) for the particular records storage medium.

5.6 *On-site protection*

5.6.1 On-site protection involves protection of the original vital records in the primary place of business or at the point of creation/use of the information. It requires improved accommodation protection and security and the use of special facilities and equipment such as vaults, designated file rooms and fire resistant safes, cabinets and containers, etc. to safeguard vital records housed in office buildings.

5.6.2 For the protection of vital records that should be maintained on-site, B/Ds should install and implement proper accommodation improvement equipment and measures. These include reliable fire and burglar alarm systems, suitable fire extinguishing equipment, and adequate controls for temperature, humidity, ventilation and lighting.

5.6.3 Records vault, which is a fire-resistive enclosure constructed within an office building, is used for the protection of large quantity of vital records stored in a non-fire-resistant building. Vital records vaults are specially designed and constructed to provide maximum records protection and are very

expensive. B/Ds should carefully balance the costs and benefits before making a decision for the construction of vault of this kind in its premises.

5.6.4 Designated file rooms for vital records should be equipped with fire protection facilities, such as sprinkler system and fire-resistant door. For the storage of irreplaceable vital records, file rooms should be used in combination with fire resistant safes, cabinets and/or containers for better protection.

5.6.5 Fire resistant safes, cabinets and containers are used for small quantity of highly active vital records which need to be kept close to the records users for immediate reference within a short period of time. This type of equipment is often rated to withstand certain temperatures for specific periods of time. The contents of the equipment will burn if a fire exceeds such limits. Temperature and humidity limits required for records storage equipment to protect the integrity of different records media are given below:

Records media	Temperature (°C)	Relative Humidity (%)
Paper	176.7	100
Microform (silverbase)	65.6	85
Photographic material	65.6	85

5.6.6 On-site storage usually is the most expensive protection method and it should be considered only when other methods are not operationally feasible. Before making a final decision to protect their vital records on-site, B/Ds should consider the following:

- a. Does the on-site storage have proper temperature, ventilation and humidity controls for the records media? For advice on the environmental suitability of records storage, B/Ds may contact the Preservation Service Office of GRS.
- b. What security measures are in place to stop unauthorised access to the storage area?
- c. Are the office premises secured against fire, flood, vermin and other disasters?
- d. Is the storage equipment adequately safe from disasters and rated for proper records medium?
- e. Is it safer to store the only copy of a vital record on-site than storing it off-site in a records centre?

5.6.7 In developing on-site records protection facilities and taking precautions to potential threats, B/Ds should also seek advice from the Security Bureau and Fire Services Department as appropriate.

5.7 *Off-site storage*

5.7.1 Off-site records protection involves maintaining the original or duplicate copies of vital records in off-site facilities away from the primary place of business of the B/D and/or from potential hazards. Generally, this method is considered more reliable than on-site protection since the occurrence of disasters at both sites is believed to be remote.

5.7.2 Remote storage facilities for storing vital records may be operated by B/Ds themselves or commercial firms. Considerations for using remote site include:

- a. records should be at a safe distance from the office premises of B/Ds but as accessible as possible;
- b. in the event of emergency, records should be available for immediate use;
- c. the site should be designed to minimise the risks of damage from possible hazards;
- d. records duplication or reproduction equipment should be available on site; and
- e. records handling staff of the off-site storage should have security clearance at adequate level.

5.8 *Guidelines on the choice of protection methods*

5.8.1 The goal of selecting protection method is to use the simplest and the most economical method(s) that fit(s) the requirements of the circumstances. The degree of protection provided, to a large extent, depends on the importance of the records as well as the ease of duplication or reconstruction. In deciding protection methods for their vital records, B/Ds are recommended to consider the following:

- a. Needs for records accessibility in the event of an emergency
B/Ds should assess their accessibility needs to different categories of vital records in the event of an emergency. Vital records that must be readily available for reference may require different methods of protection from those records infrequently used.
For example, records on emergency planning and operation are required for use within a very short period of time in the event of emergency, a copy of them may need to be kept on-site and another

copy off-site. Sometimes, because of immediate information retrieval requirement, paper records are preferred to avoid reliance on special equipment. On the other hand, copies of accounts payable records are required to re-establish financial position only after an emergency is over, they may be transferred to off-site storage.

b. Available resources

One of the most critical factors in choosing protection methods is to measure the need for protection against the available resources. A rule of thumb is that the cost of protection should not exceed the cost of replacement or reconstruction with the exception of those irreplaceable records.

c. Sensitivity of records and information

For those records containing vital and highly sensitive information, duplication and off-site storage should be done carefully and where appropriate. B/Ds may prefer to enhance on-site records storage protection and implement appropriate access and daily handling procedures to ensure their physical and content security.

d. Length of retention

Vital records of a short-term nature may require different methods of protection from those of longer retention needs. For vital records which need to be kept for at least 7 years, microfilming is a recommended option because of the durability and information integrity it provides.

e. Physical conditions and quantity of records

B/Ds should be aware that paper records of poor physical quality are not suitable for mass microfilming. If the quantity of records to be protected is huge, dispersal or off-site storage may be more viable.

f. Existence and accessibility of duplicate or parallel records

B/Ds should consider the existence and accessibility of duplicate or parallel records at their premises or under the control of other B/Ds or private organisations. If duplicate records or adequate summaries of the records can be found elsewhere, B/Ds may arrange to protect only one set of the records for share use in case of emergency.

VI. RISK PREVENTION

6.1 *Risk preventive measures*

6.1.1 Prevention is the first line of defence against risks. Effective preventive measures can reduce the probability of disasters and help minimise the impact if they do occur. Thus preventive measures should be incorporated into the vital records protection programme.

6.1.2 As far as protection of vital records is concerned, preventive measures mainly cover:

- a. environmental and security control of places where records are stored; and
- b. use and handling of vital records in day-to-day operation.

6.1.3 In formulating preventive measures, B/Ds should review their building plans, physical access control procedures, records manuals and records handling procedures to identify areas for improvement.

6.1.4 A list of considerations in developing handling procedures for vital records is given in paragraph 7.3.1.

6.2 *Building maintenance and security*

6.2.1 Proper building maintenance and security help reduce both the risks and their impact. The following areas should be reviewed and proper measures should be designed and implemented regularly:

- control of access to building;
- control of access to records storage areas;
- oversight of intrusion alarm system;
- oversight of guarding services;
- routine spot-check of building and equipment;
- routine maintenance work should be subject to surveillance;
- proper custody and security of keys;
- care and maintenance of combination locks;
- prompt return of all relevant identification and keys from terminated staff;
- maintenance of clear passageways;
- inspection of windows and roofs;

- correct storage of inflammable liquids;
- inspection of electrical equipment and wiring, including heating and ducting and air conditioning equipment; and
- removal of rubbish and building debris.

6.3 *Prevention of fire damage*

6.3.1 Fire, which is usually caused by electrical faults and cigarettes, is perhaps the greatest and the most destructive threat to records. The most effective way to reduce extensive fire damage is to install a proper fire detection and suppression system. In addition, B/Ds are suggested to implement the following:

- strictly prohibit smoking in records storage and adjacent areas;
- keep trash and non-record materials away from records storage;
- do not put chemicals, inflammable and combustible materials in or near records storage;
- ensure that electrical equipment is operated at a safe distance from inflammable materials;
- ensure that electrical equipment is turned off after use;
- ensure that adequate ventilation is provided for large equipment such as photocopiers to prevent over heating and possible ignition;
- check electrical outlets, wiring and fixtures, equipment and appliances regularly and ensure that they comply with local fire, electrical, and heating codes;
- install automatic fire detection and suppression system;
- do not pile records on top of shelving that obstructs the proper functioning of water sprinklers;
- portable fire extinguishers should always be available at strategic points and staff are informed where they are located and how to use them;
- check regularly fire/smoke detection and suppression system, such as alarms, sprinklers and extinguishers;
- keep fire doors closed;
- keep fire escape routes and exits free of clutter; and
- conduct fire drills periodically to practise emergency procedures.

6.4 *Prevention of water damage*

6.4.1 Water damage is often caused by poor design of water carrying installation and/or poor maintenance. Preventive measures to reduce the risk

of water damage may include:

- avoid storing records in basements, under water pipes, near skylights, unblocked windows or air cooling units;
- do not put records on the floor;
- store records on metal shelves at least four to six inches off the floor (higher if flooding is more common);
- use solid fiberboard boxes rather than corrugated or pressboard cartons to store records;
- keep waterproof protective coverings nearby to cover records in case of water;
- inspect the roof for leaks regularly;
- locate all drains and check them regularly;
- inspect regularly the sprinkler system;
- check regularly if the records storage area is susceptible to flooding or leaking roof, drains or water pipes; and
- do not install carpet in records storage since it will retain water and prevent drainage when flooding occurs.

6.4.2 A checklist for prevention against water damage from rainstorm or typhoon is given at **Appendix F**.

6.5 *Promote staff awareness and cooperation*

6.5.1 Increased staff awareness and cooperation always helps reduce the possibilities of disasters and limit the extent of damage. Through promoting staff understanding of vital records protection, staff will be more alert to trouble spots and irregularities in daily maintenance work.

6.5.2 To promote staff awareness and cooperation, the following may be considered:

- a. involve staff in planning, developing and implementing policies and procedures for protecting vital records as much as possible;
- b. include protection of vital records in job descriptions of all records staff and discuss the issue during the interview process with new staff member;
- c. inform staff of records protection policies and procedures through periodic training and briefing sessions; and
- d. circulate circulars or directives in respect of vital records protection periodically.

VII. PROGRAMME MAINTENANCE

7.1 *Programme maintenance procedures*

7.1.1 After the vital records protection programme has been set up, B/Ds should devise proper maintenance procedures to ensure the overall efficiency and effectiveness of the programme over time.

7.2 *Records updating (cycling)*

7.2.1 As with other records, vital records may outlive their usefulness. To guarantee the usefulness of information contained in the vital records, B/Ds should develop procedures to update information or cycle copies of vital records by removing obsolete items and replacing them with the most recent version as and when necessary.

7.2.2 Frequency of updating/cycling is solely based on how current vital records must be to meet B/Ds' information requirements and functional responsibilities. Subject to those needs and the medium on which the vital records are maintained, updating/cycling may be performed at any regular intervals or whenever vital information becomes obsolete.

7.3 *Procedures for handling vital records*

7.3.1 In developing handling procedures for vital records, B/Ds should consider the following:

- a. officers responsible for monitoring the use and handling of vital records should be designated and the appointment should be made known to all personnel concerned;
- b. access to and transmittal of vital records should be dealt with by authorised personnel only;
- c. whenever possible, vital records should be physically separated from other records and properly marked or stamped for easy identification;
- d. vital records should not be accumulated on the desks of users or on the floor. Users should return them to the designated storage at the end of each working day or immediately after use; and
- e. when vital records are operationally required to route temporarily

to other B/Ds or organisations during normal course of business, they should make copies of these records for distribution and use.

7.4 *Staff training*

7.4.1 Do not underestimate training. Any well-planned records protection procedures will not be effective or useful unless all responsible personnel thoroughly understand the importance of the programme and strictly follow the necessary procedures. To help achieve this, adequate training should be provided to staff assigned with responsibilities in protecting vital records.

7.4.2 In developing staff training programme, B/Ds may consider the following:

- a. programme briefings should be periodically given to senior management, in particular those who are new to the B/Ds;
- b. training objectives and required skill levels should be tailored to different target groups and are appropriate to the assigned duties of the trainees; and
- c. whenever possible, the training should be integrated with existing training initiatives, particularly in such areas as records management and emergency coordination.

7.5 *Testing and review*

7.5.1 Vital records protection programme should be tested on a regular basis (e.g. annually) and the procedures updated to enhance its adequacy, completeness and overall effectiveness. Periodic testing helps identify weak areas for improvement and keeps members of staff alert and prepared to cope with emergency.

7.5.2 Testing, which may take the form as a tabletop audit or a full-scale exercise, is critical to ensure that the programme works as it is expected. An effective way to test the programme is to stimulate the effects as close to the major and most probable emergency as possible. The type of exercise and the type of emergency should also be changed over time to provide broad training.

7.5.3 No matter what test method B/Ds undertake, a review session should be arranged to consolidate feedback from participants. If programme deficiency is identified after the test, modifications should then be made.

7.5.4 As B/Ds may develop and grow with significant changes in functions and activities, the ensuing changes in records and personnel must be integrated into the vital records protection programme as quickly as possible. This is to ensure that vital records are kept current, adequately protected, accessible and usable whenever needed.

7.6 *Self-evaluation checklist*

7.6.1 To assist in evaluating the effectiveness of vital records protection measures devised in B/Ds, the following checklist has been developed. B/Ds are encouraged to complete the checklist on a scheduled basis to ensure that the measures are complete.

	Considerations		Remarks
1.	Have you issued any policy documents formalising your vital records protection programme?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
2.	Have you designated an official responsibility for vital records protection and appointed a Vital Records Coordinator in your B/D?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
3.	Have you assessed and prioritised the potential risks and their acceptable levels to your records?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
4.	Have you determined those critical functions/activities that needed to be continued during and after an emergency?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
5.	Have you determined those critical functions/activities that most impact the rights/interests of your B/D, government as a whole and members of the public?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
6.	Have you identified your vital records series and draw up vital records schedule(s)?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
7.	Does your programme include routine generation of copies of vital records?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
8.	Are these copies of vital records being kept in the same building as the originals?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
9.	Have you updated your copies of vital records at scheduled intervals?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
10.	Have you established procedures covering the use and handling of vital records in daily activities, during and after an emergency?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
11.	Have you trained your records management staff in their vital records protection responsibilities?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
12.	Have you periodically reviewed, tested and updated your vital records protection programme?	<input type="checkbox"/> Yes <input type="checkbox"/> No	

**Sample Circular Announcing the Establishment of a
Vital Records Protection Programme**

Ref. (12) in ABC 1-50-8

5 July 2016

ABC Department Internal Circular No. 10/16

(This circular should be re-circulated to all staff at yearly intervals.)

Establishment of a Vital Records Protection Programme

This circular is to announce for general information the establishment of a Vital Records Protection Programme in *ABC Department*.

2. Emergency and disasters are sudden and unexpected events that can harm this office and its resources. To enable us to continue/resume operation during and immediately after an emergency or a disaster, and to mitigate loss and damage, records containing vital information should be identified, selected and properly protected against potential threats. In this connection, the Departmental Records Manager (DRM) [i.e. SEO(Adm)] has been appointed as the Vital Records Coordinator to develop a Vital Records Protection Programme in *ABC Department* with the following objectives:

- a. To identify records which contain vital information required for emergency operation, protection of the legal and financial rights and interests of the government and of organisations and individuals affected;
- b. To employ records management techniques to ensure the availability of the vital records in the most cost-effectively way; and
- c. To ensure that the vital records are updated and can be retrievable in usable condition as and when required.

3. As a start, DRM will approach each section head to arrange briefing sessions and interviews in order to introduce the programme and collect information by 30 September 2016.

4. Input and support from all sections will be necessary for the programme's success. As we plan to have the programme in place by the end of the year, I should be grateful for your full cooperation.

5. Queries regarding the vital records protection programme should be directed to the DRM at 2345 6789.

Director of *ABC Department*

Site Inspection Form

Location of the Site: _____

Date: _____ Surveyor: _____

PART I: General Conditions of the Site

Type of building: _____

Roof type and condition: _____

Windows/Doors (type and condition): _____

Building security installations: ☐ Burglar alarms ☐ Fire alarms ☐ Smoke sensors
☐ Sprinklers ☐ Extinguishers ☐ Others: _____

Potential risk in the surrounding area: _____

Address & tel. no. of the nearest fire station: _____

Address & tel. no. of the nearest police station: _____

PART II: General Conditions of Records Storage

Location in building: _____

ClimateTemperature: _____ Relative humidity: _____ ☐ Air filtration ☐ Air conditioning**Lighting**☐ Sunlight ☐ Fluorescent ☐ Fluorescent with ultraviolet filters ☐ Others: _____**Security**

Enforced measures: _____

☐ Burglar alarms ☐ Fire alarms ☐ Smoke sensors ☐ Sprinklers ☐ Extinguishers**Storage Equipment**☐ Steel racks ☐ Wooden shelves ☐ File cabinets ☐ Containers ☐ Others: _____**PART III: Identified Records Risks**

Theft and vandalism: _____

Fire and electrical hazards: _____

Water risks: _____

Evidence of: ☐ Rodents ☐ Fungi ☐ Temperature fluctuation ☐ Humidity fluctuation

Others: _____

PART IV: General Remarks

Sample Risk Assessment Form**PART I : General Information****Bureau/Department:**

Admin. Wing

Division/Section:

Government Records Service

Completed by:

Departmental Records Manager

Completion date:

31 July 2017

PART II : Frequency and Impact of Potential Risks

Potential risks	Estimate of frequency/year (P)	\$ for information replacement/reconstruction (C)	Impact ranking (High/Medium/Low)
Computer virus	0.4	\$400,000	High
Water damage	0.3	\$150,000	Medium-high
Fire	0.2	\$300,000	Medium
Theft/vandalism	0.1	\$50,000	Low
Power failure	0.1	\$150,000	Low
Vermin	0.05	\$100,000	Low
Earthquake	0	\$5,000,000	N/A

PART III : Total Cost Per Year

= HK\$265,000 (Fire: 0.2 x \$300,000) + (Flood: 0.3 x \$150,000) + (Computer virus: 0.4 x \$400,000)

(Major Risk 1: P x C) + (Major Risk 2: P x C) + (Major Risk 3: P x C) + (Major Risk 4: P x C) + ... +

VRS unique identifier

Vital Records Schedule (VRS)

(Please read the explanatory notes at the end before completing this Schedule)

I. Bureau/Department

1. Bureau/Department:

2. Branch/Division/Section:

II. Essential information on vital records

3. Vital records series title:

4. Date range:

5. Security classification of the vital records (*Select all that apply*):

- | | |
|---|--|
| <input type="checkbox"/> Unclassified | <input type="checkbox"/> RESTRICTED (TENDER) |
| <input type="checkbox"/> RESTRICTED (ADMIN) | <input type="checkbox"/> RESTRICTED (CONTRACT) |
| <input type="checkbox"/> RESTRICTED (APPOINTMENT) | <input type="checkbox"/> CONFIDENTIAL |
| <input type="checkbox"/> RESTRICTED (MEDICAL) | <input type="checkbox"/> SECRET or above |
| <input type="checkbox"/> RESTRICTED (STAFF) | |

6. Form(s) of the vital records (*Select all that apply*):

- (i) ☐ paper
- (ii) ☐ microform (e.g. microfilm)
- (iii) ☐ electronic
- (iv) ☐ non-electronic other than (i) & (ii) (*Please specify:* _____)

7. Existing quantity of the vital records (*Fill in all that apply*):

_____ linear metres for paper records

_____ megabytes/gigabytes/terabytes* for electronic records

_____ items/ _____* for other records

8. Estimated annual growth rate of the vital records (%):

9. Information system(s) which manages and stores the vital records (if applicable):

* Please delete as appropriate.

II. Essential information on vital records (cont'd)

10. Storage media for storing off-line electronic vital records (<i>Select all that apply</i>): <input type="checkbox"/> hard disk <input type="checkbox"/> diskette <input type="checkbox"/> optical disk (including CD and DVD) <input type="checkbox"/> flash drive <input type="checkbox"/> magnetic tape <input type="checkbox"/> magneto-optical disk <input type="checkbox"/> others (<i>Please specify:</i> _____) <input type="checkbox"/> not applicable
11. Equipment required for retrieving and viewing the vital records (if applicable):
12. Storage location(s) of the vital records:
13. General condition of the vital records: <input type="checkbox"/> good <input type="checkbox"/> fair <input type="checkbox"/> poor <input type="checkbox"/> not applicable
14. Retention and disposal of the vital records:
(a) disposal authority:
(b) retention period:
(c) disposal action:
15. Services/business operations/functions that require the vital records during and/or after the occurrence of an emergency or a disaster:
16. Implications/consequences if the vital records are seriously damaged or lost:
17. The vital records will be required: <input type="checkbox"/> immediately after the occurrence of _____ (a specific type of an emergency or a disaster) <input type="checkbox"/> _____ hours/days* after the occurrence of _____ (a specific type of an emergency or a disaster) <input type="checkbox"/> immediately/ _____ hours/days* after the occurrence of an emergency or a disaster in general <input type="checkbox"/> others (<i>Please specify:</i> _____)

II. Essential information on vital records (cont'd)

18. Potential hazard(s) to the vital records (*Select all that apply*):

- | | |
|---|---|
| <input type="checkbox"/> fire | <input type="checkbox"/> flooding/water |
| <input type="checkbox"/> insects and rodents | <input type="checkbox"/> security |
| <input type="checkbox"/> prolonged power failure | <input type="checkbox"/> computer failure |
| <input type="checkbox"/> IT network failure | <input type="checkbox"/> landslide/landslip |
| <input type="checkbox"/> tropical cyclone/storm surge | |
| <input type="checkbox"/> others (<i>Please specify:</i> _____) | |

19. Possibility of reconstructing/restoring the vital records in case of serious damage or loss:

- | | |
|--|--|
| <input type="checkbox"/> impossible | <input type="checkbox"/> reasonably easy and at an acceptable cost |
| <input type="checkbox"/> extremely difficult and/or costly | <input type="checkbox"/> very easy and inexpensive |

III. Protection of vital records

20. Protection method(s) (*Select all that apply*):

- ☐ duplication (*Go to item 21, then item 25*)
- ☐ dispersal (*Go to item 22, then item 25*)
- ☐ on-site protection (*Go to item 23, then item 25*)
- ☐ off-site storage (*Go to item 24, then item 25*)
- ☐ others (*Please specify:* _____) (*Go to item 25*)

21. Duplication of vital records:

(a) Form of duplicated vital records (*Select all that apply*):

- (i) ☐ paper
- (ii) ☐ microform (e.g. microfilm)
- (iii) ☐ electronic (including digitised version of vital records)
- (iv) ☐ non-electronic other than (i) and (ii) (*Please specify:* _____)

(b) Storage media for storing duplicated electronic vital records (*Select all that apply*):

- | | | |
|---|--|--|
| <input type="checkbox"/> hard disk | <input type="checkbox"/> diskette | <input type="checkbox"/> optical disk (including CD and DVD) |
| <input type="checkbox"/> flash drive | <input type="checkbox"/> magnetic tape | <input type="checkbox"/> magneto-optical disk |
| <input type="checkbox"/> others (<i>Please specify:</i> _____) | | <input type="checkbox"/> not applicable |

(c) Storage location(s) of duplicated vital records:

(d) Frequency of duplication:

- | | | | |
|---|-----------------------------------|----------------------------------|------------------------------------|
| <input type="checkbox"/> daily | <input type="checkbox"/> weekly | <input type="checkbox"/> monthly | <input type="checkbox"/> quarterly |
| <input type="checkbox"/> half-yearly | <input type="checkbox"/> annually | | |
| <input type="checkbox"/> others (<i>Please specify:</i> _____) | | | |

III. Protection of vital records (cont'd)

22. Dispersal of vital records:

(a) Form(s) of copies of the vital records which are stored in other locations away from the primary place of business *(Select all that apply)*:

- (i) ☐ paper
(ii) ☐ microform (e.g. microfilm)
(iii) ☐ electronic
(iv) ☐ non-electronic other than (i) and (ii) *(Please specify: _____)*

(b) Storage media for storing copies of electronic vital records *(Select all that apply)*:

- ☐ hard disk ☐ diskette ☐ optical disk (including CD and DVD)
☐ flash drive ☐ magnetic tape ☐ magneto-optical disk
☐ others *(Please specify: _____)* ☐ not applicable

(c) Storage location(s) of copies of vital records:

(d) Frequency of copying vital records:

- ☐ daily ☐ weekly ☐ monthly ☐ quarterly
☐ half-yearly ☐ annually
☐ others *(Please specify: _____)*

23. Enhancement/modification of building and building services facilities, enhancement of building maintenance and/or adoption of other technique/measures to safeguard vital records stored on-site (please provide a brief description):

24. Off-site storage location(s) of the vital records:

25. The protection method(s) selected in item 20:

- ☐ has already been adopted
☐ has been adopted except for _____ *(please specify)*
☐ will be adopted by _____ *(date)*

26. Remarks:

IV. Review of vital records schedule

27. Next review date of this vital records schedule:

V. Other useful information

[Note: B/Ds have the discretion to determine whether the following information should be provided.]

28. Person(s) to be contacted for retrieval and access to the vital records during and/or after an emergency or a disaster:

(a) Name:

(b) Post:

(c) Branch/Division/Section:

(d) Mobile telephone no.:

(e) E-mail address:

29. Related vital records series:

30. Related reference no. (e.g. Disposal Authority no.):

VI. Endorsement of vital records schedule

Completed by (Note 1):

Endorsed by (Note 2):

Name:

Name:

Post:

Post:

Branch/Division/Section:

Branch/Division/Section:

Signature:

Signature:

Date:

Date:

Note 1: An officer not below the rank of **Executive Officer II or equivalent** should be responsible for drawing up a VRS.

Note 2: B/Ds should designate an officer not below the rank of **Chief Executive Officer or equivalent** to endorse a VRS.

Vital Records Schedule Explanatory Notes

- (1) A vital records schedule has been developed for bureaux and departments (B/Ds) to document essential information on vital records. B/Ds may include other useful information in the vital records schedule if deemed necessary. For example, B/Ds may include subcategories of paper records such as contract documents, technical drawings, layout plans, etc. under item 6.

(2) **VRS unique identifier**

B/Ds should assign a unique identifier to each vital records schedule. The identifier should be centrally assigned and controlled to ensure that it is unique across the organisation. For example, the unique identifier may take the form -

VRS001-RSDO

where

- (a) “VRS” represents the vital records schedule;
- (b) “001” is a three-digit non-meaningful sequence number; and
- (c) “RSDO” denotes the branch/division/section that the vital records series belongs to.

(3) **Item 3 - Vital records series title**

A vital records series title should be concise and meaningful to briefly describe the type(s) of records and the functions or subject matters that the records deal with, e.g. “Departmental contingency plan for natural disasters” and “Emergency contact lists of the Rescue Co-ordination Centre”.

(4) **Item 4 - Date range**

The date range refers to the creation dates of the earliest and the latest records of a vital records series, e.g. 15 July 2000 - 20 July 2010. B/Ds may use “+” to indicate that the vital records series is still active and new records are added to the series from time to time, e.g. 24 July 2010+.

(5) Item 6 - Form(s) of vital records

Form(s) of vital records may include -

- (a) paper (e.g. contract documents, building plans and maps);
- (b) microform (e.g. microfilms and aperture cards);
- (c) electronic (e.g. text documents, spreadsheets and digital images);
and/or
- (d) non-electronic other than paper and microform (e.g. audio cassette tapes).

(6) Item 7 - Existing quantity of vital records

B/Ds should adopt the following measurement units to work out the quantity of different forms of vital records -

- (a) paper records in linear metre¹; and
- (b) electronic records in megabyte/gigabyte/terabyte as appropriate.

For other non-electronic records, the unit of measurement may be different depending on the nature of the records. B/Ds may specify a standardised unit as appropriate.

(7) Item 8 - Estimated annual growth rate of vital records

The estimated annual growth rate of vital records (in terms of percentage) should be worked out by adopting the following formula -

$$\frac{\text{Estimated quantity of vital records to be created annually}}{\text{Total quantity of vital records as at a specified date}} \times 100\%$$

(8) Item 9 - Information system(s) which manages and stores vital records

Please provide the title and a brief description of the information system(s) which manages and stores electronic vital records. **This item does not apply to non-electronic records.**

¹ Linear metre (lm) is the unit of measurement of paper records. If records are stored vertically on shelves or in drawers, they should be measured along the horizontal axis. As a general reference, a 4-drawer filing cabinet can hold approximately 2 lm of records.

(9) Item 10 - Storage media for storing off-line electronic vital records

Please select the existing storage media of off-line electronic vital records. **This item does not apply to the following -**

- (a) non-electronic vital records;
- (b) electronic vital records which are managed and stored in information systems; and
- (c) backup copies of electronic vital records generated together with other electronic records in the course of day-to-day IT system management.

(10) Item 11 - Equipment required for retrieving and viewing vital records

Equipment, devices and/or software applications required to enable users to retrieve, view and use vital records, particularly for vital records in electronic form or in microforms. **B/Ds should ensure that those equipment, device and/or software applications are readily available in the event of an emergency or a disaster.**

(11) Item 12 - Storage location(s) of vital records

It refers to the exact storage location(s) of vital records. As a good practice, B/Ds should specify the room/floor/name of building/address of the building. B/Ds may also specify the cabinet, shelf, safe, etc. in which non-electronic vital records and storage media for storing off-line electronic vital records are stored. For electronic records stored in an information system(s), B/Ds should specify the location(s) of the computer server(s) used for storage of the records.

(12) Item 13 - General condition of vital records

(a) Non-electronic vital records

B/Ds should assess the general condition of vital records to examine whether they are complete, understandable and usable. They should be kept clean and secure and properly protected against water and fire hazards.

(b) **Electronic vital records**

B/Ds should assess the general condition of -

- (i) the storage media in which electronic vital records are stored; and
- (ii) the file format of electronic vital records

to examine whether the electronic vital records are retrievable, accessible, complete, understandable and usable.

(13) Item 14 - Retention and disposal of vital records

(a) **Programme records**

Please document the approved Disposal Authority (DA) number in item 14(a), retention period in item 14(b) and disposal action in item 14(c) of the vital records concerned.

(b) **Administrative records**

Please document in item 14(a) the subject and records group of the vital records as shown in the General Administrative Records Disposal Schedules (GARDS) developed by GRS, e.g. “1-90 Emergency Planning - Others (1)” and the corresponding disposal remarks, e.g. “3 years” and “Destruction” in items 14(b) and (c) respectively.

(14) Item 15 - Services/business operations/functions that require vital records during and/or after the occurrence of an emergency or a disaster

Please describe the services, business operations and/or functions that require vital records during and/or after the occurrence of an emergency or a disaster. For example, the vital records are immediately required to support evacuation and rescue services for flood victims in the event of a serious flooding occurring in Lantau Island.

(15) Item 16 - Implications/consequences if vital records are seriously damaged or lost

Please list the possible negative implications/consequences in the event of serious damage to or loss of vital records. For example, the loss of vital records relating to rescue operation and emergency contact lists “will cause serious delay in providing evacuation and rescue services for flood victims and emergency treatment to casualties and their conveyance to hospitals”.

(16) Item 18 - Potential hazard(s) to vital records

B/Ds should conduct a risk assessment to assess the potential risks of vital records. Please refer to section 3.3 - Risk analysis/assessment in *Manual on Vital Records Protection* developed by GRS for details of the risk analysis/assessment.

(17) Item 19 - Possibility of reconstructing/restoring vital records in case of serious damage or loss

B/Ds should critically assess the possibility of reconstructing or restoring the vital records in the event of serious damage to or loss of vital records. This will help B/Ds determine the appropriate protection methods of the vital records.

(18) Item 20 - Protection method(s)

B/Ds should note that multiple protection methods can be adopted as appropriate to protect vital records. Please refer to *Manual on Vital Records Protection* for details of the protection methods. A brief description of the methods is provided below for easy reference.

(a) Duplication

This method produces extra copies of vital records when they are created, or through scheduled reproduction such as microfilming or scanning at regular intervals specifically for protection.

(b) **Dispersal**

This method produces extra copies of vital records when the records are created and store them in location(s) away from the organisation's primary place of business.

(c) **On-site protection**

This method improves and/or modifies accommodation and building services facilities such as building vaults and installation of fire resistant safes, or adopts other technique/measures to protect vital records in the primary place of business.

(d) **Off-site storage**

This method keeps the original or duplicate copies of vital records in a place(s) away from the primary place of business. For example, a B/D keeps its vital records in three district offices away from its headquarters building in Wan Chai.

(19) Item 26 - Remarks

Other information about vital records and/or protection methods of the vital records may be recorded in this item if deemed necessary.

Appendix E

Sample Master List⁽¹⁾ of Vital Records Schedules

Position as at 1 August 2017

Page 1 of 2

Bureau/Department: ABC Department

VRS unique identifier	Vital records series title	Storage location(s) of the vital records ⁽²⁾	Service(s)/business operations/ functions that require the vital records in the event of an emergency or a disaster	Branch/ Division/ Section	Officer responsible for drawing up the VRS	Next review date of VRS
VRS001- Div A	General building plans and layout plans of PQQ Government Offices	(1) Original vital records are stored in: Cabinet 3, Room 401, 4/F, PQQ Government Offices, 13 Tsui Ping Road, Kwun Tong	To support rescue operation in the event of a fire occurring in the office building.	Division A	Assistant Officer (A)1	1.8.2020
		(2) Duplicated copies are stored in: Cabinet 1, Room 112, 1/F, Kowloon East District Office, Cha Kwo Ling Road, Kwun Tong				
VRS002- Adm Div	Contract documents of BBB Project	(1) Original vital records are stored in: Fire-resistant safe, Room 2101, 21/F, PQQ Government Offices, 13 Tsui Ping Road, Kwun Tong	To protect the legal and financial rights and interests of the Government in this project.	Adm Division	Senior Executive Officer (F)	Review upon the completion of the project scheduled in mid-2019
		(2) No duplicated copies				

Sample Master List⁽¹⁾ of Vital Records Schedules

Position as at 1 August 2017

Page 2 of 2

Bureau/Department: ABC Department

VRS unique identifier	Vital records series title	Storage location(s) of the vital records ⁽²⁾	Service(s)/business operations/ functions that require the vital records in the event of an emergency or a disaster	Branch/ Division/ Section	Officer responsible for drawing up the VRS	Next review date of VRS
VRS003-Div B	Operation manuals of CCC system	(1) Original vital records are stored in: Cabinet 10, Room 801, 8/F, PQQ Government Offices, 13 Tsui Ping Road, Kwun Tong	To resume the operation of this mission-critical system immediately after a disaster.	Division B	Systems Manager (B)1	Review when there is system upgrade
		(2) Duplicated copies are stored in: Cabinet 28, Room 282, 2/F, Kowloon East District Office, Cha Kwo Ling Road, Kwun Tong				

Notes:

- (1) Bureaux and departments may add other useful information in the master list as appropriate.
- (2) Please document the storage locations of the original and duplicated copies of vital records as appropriate.

Prepared by: Mary WONG

Post: ADS(Adm)

Date: 1 August 2017

Appendix F

Checklist for Prevention against Water Damage from Rainstorm/Typhoon

	Considerations		Remarks
1.	Have you checked the identified water penetration danger points and areas in your premises?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
2.	Have you checked the gutters, downpipes and drains to ensure they are free from blockage and leakage?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
3.	Have you moved or secured furniture, plants, or other physical objects off the premises that can be blown into windows or glass doors?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
4.	Have you removed all records from floor, windows and desk surface to secure records storage?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
5.	Have you closed and locked the records storage equipment (such as shelves, cabinets and drawers)?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
6.	Have you lowered waterproof protective coverings over open records storage equipment (such as racks, shelves, cabinets)?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
7.	Have you turned off the electricity and disconnected computers, printers and microfilm reader-printers?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
8.	Have you covered computers, printers and microfilm reader-printers?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
9.	Have you closed typhoon shutters and secured the windows?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
10.	Have you closed and locked the doors to all offices and records storage areas?	<input type="checkbox"/> Yes <input type="checkbox"/> No	