# **Highland & Western Isles Valuation Joint Board**

Business Continuity Plan in the Event of Information Systems Failure

### **Introduction**

The purpose of this document is to identify the key risks which threaten the critical computer systems operated by the Assessor and Electoral Registration Officer and detail the measures that are in place to mitigate the effects of failure in any part of the system which may have an adverse effect on business continuity. The wider provision of IT infrastructure is provided to the Board by the Highland Council through a contract with an external provider and the technical aspects of that infrastructure are outwith the scope of this document and fall under Highland Council/external provider procedures and responsibilities. Likewise, the software used for accounting purposes is hosted by The Highland Council and falls to be covered by Highland Council procedures.

The criticality of any failure is partially determined by timing. In the run up to significant events such as elections and revaluation the possible impact is greater. The impact from a failure during election periods is considered to be greatest. During such time, the electoral systems are categorised as high priority by the IT provider and consequently faster response times are expected for any incident.

The response to a failure shall be influenced by the envisaged downtime, the capacity for data loss and whether the failure occurs in a high impact period.

#### **Possible Risks**

- 1. Software Failure/Data Loss
- 2. Hardware Failure
- 3. Network Failure
- 4. Catastrophic failure such as fire, flood or explosion
- 5. Telephone Communications Failure

#### **Software Failure/Data Loss**

All systems are backed up automatically every evening over a weekly cycle. In addition, an end of week backup is retained for a period of one month. Backups are held securely off sight. It is therefore possible to revert to a state prior to the failure event. Such a procedure can be carried out relatively quickly. During the down period, paper systems can be interrogated to maintain an element of service to the public.

A separate test system exists for electoral registration and this is held on a server in a different location. In the event of failure of the operating software, data can be loaded from backup on to the test system which would then become live. This would

not initially provide complete functionality as certain aspects of the process require links with the Department of Work and Pensions which would require time to restore.

In the case of valuation systems failure, critical information can be retrieved from the Assessors Portal as uploads are carried out on a fortnightly basis. It is also recognised that critical valuation data can be retrieved from the Finance Service NDR Assessment Roll and Council Tax systems.

Copies of necessary software are held off site for each of the systems.

## **Hardware Failure**

In the event of a hardware failure affecting the electoral registration systems, data can be loaded from back up on to the separate test server referred to above. While this is in process a degree of public service may be provided from paper systems.

The systems are held on virtual servers and can be rebuilt relatively quickly. It is anticipated that in critical times this can be achieved within 24 hours.

It is not envisaged that such criticality would apply to valuation systems, but it is envisaged that recovery is achievable within one week. During such time paper systems, supported by data held at the Assessor's Portal would provide the means to serve the public and maintain productivity.

#### **Network Failure**

A network failure event would fall to be considered in terms of Highland Council procedures; however steps would be taken within the Board to mitigate the effects pending resolution. The effect of such a failure would depend on the part of the network involved. If one or more offices were affected then it is envisaged that at critical times staff could be relocated to other offices of the Board. In the event of the links with the servers failing, then the situation would be mitigated by a reversion to paper systems. In the case of electoral registration, consideration would also be given to utilising the test server referred to above, although the feasibility of this would be dependent on the point of failure and network architecture.

# Catastrophic failure such as fire, flood or explosion

The procedure for dealing with any of the above would depend on the location and the hardware affected.

In the case of the location of the servers being compromised then the solution would follow that of hardware failure above.

In the case of an event occurring at any one of the Boards offices, then relocation of staff to either another office of the Board or temporary accommodation at one of the constituent councils would be considered. Given that the main systems operate on thin client architecture, it is readily possible to operate from any location with access to the Highland Council network.

# **Telephone Failure**

Communication with other offices of the Board and the Finance Departments should be maintained by way of mobile telephony. A system is in place for the distribution of available telephone numbers between offices.

The Freephone line used by members of the public should be diverted to an alternative office of the Board. The constituent authorities and the Scottish Assessors Association shall be informed.