# How VisitScotland prepared for a flu pandemic

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### ABSTRACT

This paper examines one of the key risks facing businesses and emergency planners today: the likely impact of a flu pandemic on business activities. The paper uses the example of a large tourism organisation — VisitScotland, the national tourism organisation for Scotland, with over 1,000 employees — and explains how it has planned and prepared for such a pandemic. The paper reports the research methods used by the authors in this planning process, including scenario planning, economic forecasting and in-house workshops to scope the range of issues to address in preparing a contingency plan for a flu pandemic.

Keywords: avian flu, flu pandemic, VisitScotland, emergency planning, scenario planning





### INTRODUCTION

There is a widely accepted view among governments and health sector agencies that it is now only a matter of time before the world faces a flu pandemic. The last year has seen a massive flurry of government planning for this potentially devastating economic event, as the World Health Organization (WHO) has encouraged governments to prepare contingency plans for the health effects and impact upon their healthcare systems. At the same time, governments have begun to take note of the World Bank's warning that the global economic impact of a flu pandemic is likely to reach some US\$800bn in worldwide economic losses. Some WHO estimates have also suggested that there could be in the region of 7-350 million deaths from flu worldwide. Businesses and public sector organisations have begun to try to understand what this

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may mean for them: major disruptions to business, especially to the retail sector, food, consumer goods, healthcare delivery and a potential curtailing of travel and tourism as major drivers of the economies of many countries. This has major consequences for individual businesses, not just in terms of business continuity for their activities and cash flow, but also in terms of access to human resources to staff the organisation, with high levels of absenteeism forecast (from 25 to 100 per cent of staff, according to some extreme forecasts) for between 5-20 days. Against this background, this paper seeks to define a flu pandemic, and explain its dimensions and expected effects by way of context for businesses and key decision makers. This is followed with a case study of how the national tourism organisation for Scotland has set about planning for and making its organisation and the Scottish tourism industry ready for a flu pandemic, emphasising the role of business continuity planning and crisis management plans to cope with major interruptions to normal business.<sup>1</sup>

So, what is a flu pandemic and what is the link to avian flu given the press and public's tendency to merge the two issues? For clarity, the paper will first define avian flu, and then examine the links with influenza and pandemics.

## WHAT IS AVIAN FLU?

Avian flu is a highly pathogenic disease also known as the fowl plague, which first appeared in Italy around 1878. Pathogenic avian influenza was first recognised in the USA around 1924–25. It occurred again in 1929 and was eradicated both times. Pathogenic and mildly pathogenic influenza A viruses occur worldwide. Highly pathogenic avian influenza A (HPAI) viruses of the H5 and H7 HA subtypes have been isolated occasionally from free-living birds in Europe and elsewhere. Outbreaks due to HPAI were recorded in the Pennsylvania area, USA, in the years 1983–84. More recently, outbreaks have occurred in Australia, Pakistan, Hong Kong, Italy, Chile and Mexico. A serious outbreak of avian influenza in the Netherlands in 2003, spreading to Belgium and Germany, affected some 250 farms and necessitated the slaughter of more than 28 million birds.

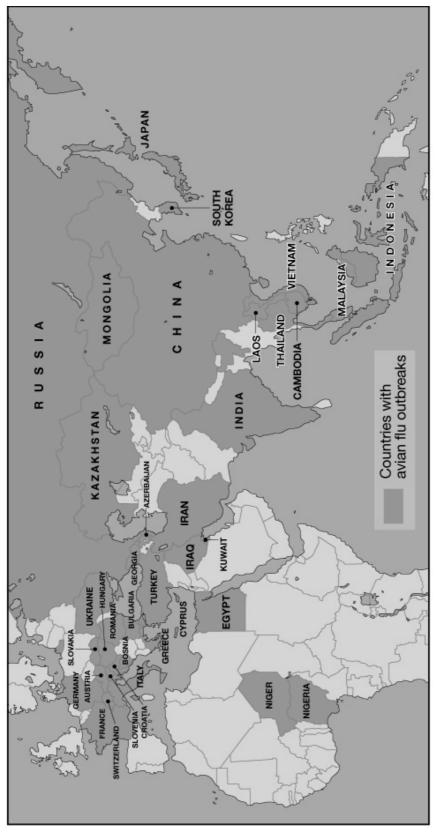
Another serious outbreak of this disease affected Japan, South Korea and southeast Asia early in 2004, reflecting what the WHO claims is a problem area for new emerging diseases in the western Pacific. This outbreak is still ongoing in China and parts of south-east Asia. There is also evidence that H5 viruses of low pathogenicity may mutate and become highly pathogenic.

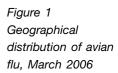
There were also a small number of cases of avian influenza in the USA and Canada early in 2004. The US strain in Texas, however, was typed as H5N2, not the same as the strain in south-east Asia. More recently, there have been reports of infection of birds across Europe, with one case reported in the east of Scotland in April 2006 (see Figure 1), with the spread largely mirroring the flight paths of migrating birds (eg swans, ducks and other hosts).

The avian form of influenza may cause human deaths where there is close contact with the birds and contamination from faeces and blood, but this in itself does not constitute a pandemic. A pandemic will only occur if the H5N1 virus mixes with another species, such as pigs, and then mutates to create a human strain. As yet, this stage has not been reached.

### WHAT IS A PANDEMIC?

Influenza is not a new problem. Many outbreaks have been tracked through time





by medical historians, with cases recorded from the 15th century onwards. There have been four major influenza pandemics in the 20th century in 1918, 1957, 1968 and 1977, the first being the most virulent, killing an estimated 50 million people worldwide and 200,000 in the UK. Influenza often reaches epidemic levels, which is a widespread occurrence of the virus in a particular community in a specific time. The fear in this instance, however, is that avian flu will mutate into a global rather than local problem — an influenza pandemic.

### WHY IS IT CONSIDERED AN ISSUE?

- *The mortality rate*: In May 2005, WHO statistics indicated a 67 per cent mortality rate among those infected and seeking treatment. When avian flu successfully mutates into human influenza, the mortality rate, according to NHS Scotland, is envisaged to be around 0.5–5 per cent, which could be well in excess of the normal 1 per cent mortality rate experienced in winter flu episodes.
- The impact on the economy: The US Centres for Disease and Control Prevention have suggested that between 89,000 to 207,000 people could die in USA, with around 314,000 the hospitalisations and 18 million outpatient visits. This would generate an impact on the US economy of between US\$71-165bn, which is still a conservative estimate. The UK Government has not yet released data with respect to the UK economy, but the impact is expected to be of the same order of magnitude in relation to the effect on GDP and productivity.
- Social distancing measures: One of few tools available to political leaders are social distancing measures, ie the ability

to temporarily ban public gatherings. This can mean closing football matches, weddings, schools or visitor attractions under government direction. Such a measure will have a huge impact on tourism, particularly for events that attract large gatherings of people. It is also likely to cause community and individual isolation.

- First impact: By the very nature of a pandemic, international travel and tourism will be the first industries to be hit. Countries will issue travel advisories. recommending tourists avoid infected countries, which will evidently have a devastating impact on the world tourism industry. Further, some scientists believe that to quarantine a country and seek to reduce the number of introduced cases of infection, it would be necessary to prevent around 95 per cent of all travel to and from that country. In a globalised society, this seems impossible. Indeed, in a world with borders that were not so porous, only a small number of countries evaded the 1918 pandemic by adopting these measures. However, a number of countries, including the USA, are now looking into contingency plans to limit and quarantine visitors.
- Globalisation: From a tourism perspective, one point of concern is the nature of a globalised world, where borders are porous, commerce is global and worldwide travel the norm. This is also accounted for by cross-border transmission, which gives rise to opportunities for any new pathogen to spread quickly and without restraint. In 1918, the influenza pandemic killed 50 million worldwide, including 200,000 in the UK; WHO forecasts that 100 million people could be killed by a new outbreak. In 1918, it took 12 months for the disease to spread across the world --but global air travel did not exist then. With air travel now enabling people to

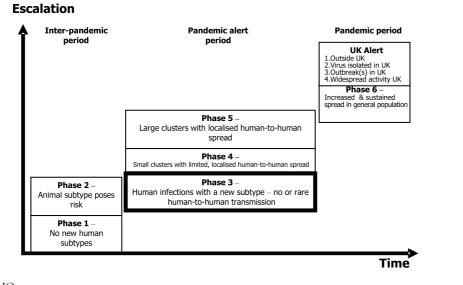


Figure 2 Overview of international phases

Source: WHO

travel across the globe in less than 24 hours, the time period would be much shorter. Indeed, a recent study by Brownstein *et al.*<sup>2</sup> provides US-based evidence on the effect of air travel on inter-regional influenza spread.

- It is overdue: There is an argument among epidemiologists that a pandemic is overdue. Global contagions tend to occur every 25 years, with some scientists predicting that this will occur sooner rather than later.
- *No one will escape*: The NHS Scotland scenarios demonstrate that 25 per cent of the population will be affected by influenza over an eight-week period, killing 0.5–5 per cent of the population. There may also be multiple waves of influenza, meaning that the pandemic could last several years as the virus mutates.
- *Immunisation*: Currently, influenza immunisation has to change and adapt to each new strain as it emerges. Not only does it take time to produce such a vaccine (at least eight weeks with research and development), but avian flu is likely to mutate and adapt as it

spreads, meaning that a vaccine may not be effective for long.

• The lessons of SARS: In China, SARS accounted for a 5.3 per cent decrease in tourism for the first five months of 2003. A pandemic is likely to have a more profound effect due to its allembracing effects on the host population. With its subsequent impact on Canadian tourism, in a region distant from the original outbreak in China, SARS illustrates the global nature of viruses, showing how carriers can transmit the disease rapidly from a source area (ie Asia) to other tourist destinations.

A country or organisation needs to be aware of the changing nature of avian flu and its potential to evolve into a flu pandemic; these stages are presented in the WHO alert system shown in Figure 2. While this is not designed to be prescriptive over the way a pandemic will unfold in a logical and phased manner, it is useful for planners and managers to understand the anatomy of a pandemic and the different trigger

### Table 1: Steps involved in scenario planning

- 1. Frame the issues the scenarios need to have a clear focus, purpose and scope.
- 2. Identify participants and solicit input from within the organisation and externally from public and private sector stakeholders.
- 3. Draw a picture of what is known outline the trends, key themes and relationships evident in the issue(s) being addressed.
- 4. Add uncertainties to the picture including unknown environmental factors, such as the impact of events and tipping points.
- 5. Sketch out possible paths with reference to the uncertainties and trends, a number of possible and plausible future paths can be highlighted.
- 6. Test for plausibility the multiple scenarios developed need to be tested for internal consistency, logic and causal relationships.
- 7. Anticipate interactive dynamics how different actors and competitors may react during the scenarios.
- 8. Formulate strategies how the organisation(s) will cope with potential changes and what actions they need to take.

Source: Developed from Miller, K. D. and Waller, H. G. (2003) 'Scenarios, real options and integrated risk management', *Long Range Planning*, Vol. 36, No. 1, pp. 93–107.

points where the issue increases in scale, significance and impact from a business perspective. From a scenario planning perspective when trying to anticipate a likely event, Figure 2 helps managers to follow many of the well-known steps in scenario planning as shown in Table 1.

With these issues in mind, attention now turns to how one public sector organisation, VisitScotland, approached the issue, planned for a pandemic, and what actions and strategies it devised. In a paper such as this, it is clearly not possible to go into the minutiae of what the organisation has done, so the emphasis will be on the scenario planning processes it has followed, and the resulting outcomes and preparedness. This has great value for other public and private sector organisations for illustrating the use of the leadership role to ensure internal preparedness and how wider tourism sector preparedness is being promoted in a proactive manner.

By way of context, it is useful to first outline what VisitScotland is as an organisation, its role in Scotland and its interconnections with the wider Scottish tourism industry. This underscores the significance of its role in ensuring the financial and economic wellbeing of the tourism industry as one of the mainstays of the Scottish economy and a key contributor to the social, economic and environmental fabric of Scotland.

# VISITSCOTLAND AND ITS ROLE IN SCOTTISH TOURISM

VisitScotland is the national tourism organisation (NTO) of Scotland whose legislative basis is incorporated under the Development of Tourism Acts of 1969 and 1984. VisitScotland is the lead organisation for tourism in Scotland, responsible to the Minister for Tourism in the Scottish Executive (Government) for destination marketing, tourism policy issues and economic advice. Tourism in Scotland is a  $\pounds$ 4.2bn (US\$7.0bn) industry, representing 3 per cent of gross value added and 9 per cent of all employment.<sup>3</sup> Tourism is the fourth largest industry in Scotland, greater than

whisky, oil and agriculture combined. VisitScotland's main domestic markets are Scotland, the North of England and the South of England. In 2005, UK tourists spent £,3.0bn and made 14.5 million trips to Scotland. Overseas tourists spent  $f_{1.2bn}$  (US\$1.5bn) and took 2.39 million trips, with the main overseas markets being North America, Germany, France and the Benelux countries. Scotland is predominantly a UK weekend leisure destination, with UK tourism representing 86 per cent of all trips and 71 per cent of revenue. VisitScotland's vision is to be the most respected national tourism agency in the world, and with the support of the Scottish Executive, wants to increase the value of Scottish tourism by 50 per cent, by 2015. VisitScotland is widely recognised as the lead body responsible for leading Scottish tourism in terms of coordinating and directing the diverse public and private sector interests associated with the sector. Previous crises such as foot and mouth disease highlighted the pivotal role the organisation plays in terms of communicating with stakeholder groups (eg businesses, the public, visitors and other organisations) which is embodied in its crisis communications strategies for unforeseen events. Such a reactive role has to be balanced with forward-looking strategic functions. This is highlighted by the fact that the only NTO globally that employs a scenario planner and systematically evaluates and reviews the state of tourism, future forecasts, changing risks (eg what would a future Scottish tourism industry and product look like in a world without oil?) and threats, as well as more detailed modelling and scenario planning of changing factors that affect tourism (eg consumer behaviour and attitudes towards tourism as an activity). It is against this background that VisitScotland identified avian flu and a flu pandemic as separate

but interconnected issues which might pose a risk to Scottish tourism, and commenced a scenario planning process in 2005.

# HOW VISITSCOTLAND PLANNED FOR A FLU PANDEMIC

Scenario planning will be a recognised area for many readers, but it is useful to illustrate some of the reasons why VisitScotland adopted this approach to a flu pandemic, and why it emerged as issues in the assessment of the global risks facing tourism. In 2005, VisitScotland identified avian flu and a flu pandemic as issues of concern to Scottish tourism, and indirectly undertook to share this as a case of good practice with other NTOs worldwide via the World Tourism Organisation. The importance of this issue was reaffirmed in 2006 when the Global Risks 2006  $report^4$  indicated that an influenza pandemic was one of the headline risks for global business in 2005 and 2006, posing acute concern. The report noted that 'short-term economic impacts would include severe impairment of travel, tourism and other service industries, as well as manufacturing and retail supply chains. Global trade, investor risk appetites and consumption demand could suffer for more extended periods'.<sup>5</sup> It is against this background that VisitScotland embarked on a research programme to engage in a scenario planning exercise to qualitatively model the complex issues associated with a flu pandemic.

This research was undertaken in tandem with the Scottish Executive's Department of Health (SEDH), which was pursuing a similar in-house programme to prepare the public sector for the consequences of a pandemic. In view of the ongoing government contingency planning, and given the importance of

Strengths	Weaknesses
Strengths Participative — insights are drawn from many sources, thereby adding rich details to envisioned futures and enhancing learning Detail rich — reaches beyond the constraints of mechanistic models and incorporates contingencies that are difficult to quantify Narrative — produces a series of stories about plausible future states that take into account the dynamic interactions of key stakeholders and the organisation's role in creating the future Broad scope — considers multiple plausible scenarios, covering a range of possible contingencies and outcomes; it facilitates diverse perspectives and helps uncover blind spots Systems thinking — encourages learning about	<ul> <li>Weaknesses</li> <li>Potentially unwieldy — without logical consistency and rigorous examination, scenarios can be nothing more than imaginative speculations</li> <li>Non-quantifiable — as many of the inputs to a scenario planning process are not quantifiable, the output is likewise not quantifiable</li> <li>Biases — envisioned scenarios may reflect current circumstances rather than future possibilities; dominant personalities or groupthink can limit the possibilities considered</li> <li>Lack of consensus — because scenario planning allows for divergent perspectives, participants may not converge on shared understandings or a common strategy</li> </ul>
the interrelations (including feedback effects) among key environmental variables Externally-focused — provides a framework to envision long-range opportunities and	
uncertainties in the organisation's environment	

### Table 2: Strengths and weaknesses of scenario planning as a research tool

Source: Miller, K. D. and Waller, H. G. (2003) 'Scenarios, real options and integrated risk management', *Long Range Planning*, Vol. 36, No. 1, p. 96.

understanding how a crisis might unfold and its intended and unintended impact on Scottish tourism, scenario planning was deemed a relevant tool to explore these issues. In the case of VisitScotland, this was formulated into a research problem, namely, how would a flu pandemic develop and impact upon Scottish tourism and what responses would be required? The research method used was similar to that used by Yeoman et al.,6 and it replicated a scenario planning method as a tool by which a range of scenarios can be constructed using drivers and trends likely to shape the future. Yeoman et al.7 used this technique to understand how the war in Iraq might affect Scottish tourism, focusing on the importance of VisitScotland's need to prepare contingency and crisis plans.

Scenario planning, as Yeoman *et al.*<sup>8</sup> argued, provided a holistic and systematic technique to approach this research problem, underpinned by the use of the technique in the wider business and management literature (eg Van der Heijden<sup>9</sup>). As with the case of the war in Iraq, this research also sought to quantify the expected disruption and changes to consumer behaviour that might occur in a pandemic. What is important to stress, in methodological terms, is the value of scenario planning as a research tool (see Table 2) and the challenges it poses in terms of operationalising it.

The scenario planner has to mix and match a range of research methods to achieve the research goal, using a triangulation of methods, which may involve a blend of qualitative methods (ie writing

# Table 3: VisitScotland scenario planning for avian flu: Scenario 1 -It's out there

In this scenario, tourists are aware that avian flu is out there, but life in Scotland goes on as normal. The impact on Scotland's GDP is very small. Unemployment has risen a little as a result and tourism has seen some disruption. In 2006, international tourism revenues dropped  $\pounds$ 208m based upon the fear of flying, especially from the US market. The American State Department takes the unprecedented step of warning American citizens to avoid travel to mainland Europe after media reports in USA Today and advice from the Center for Disease Control in Atlanta on the lack of knowledge about avian flu and risk assessment required by US travel insurers. Poor geographical knowledge among US travellers compounds the problem as they see the spread via the Channel Tunnel. Interestingly, one consequence is a rise in domestic tourism market rises by  $\pounds$ 248m in 2006, so the tourism sector actually sees a net benefit. The crisis has led many national tourism organisations to updating their crisis management procedures, re-examining their public relations strategies and developing contingency plans in case there is an outbreak of influenza.

In this scenario, the following presumptions have been made about demand:

- 5% increase in day trips
- 5% domestic markets
- 5% UK markets
- -10% short haul
- -20% USA.

The economic impact of this scenario is described in Table 4.

a range of potential scenarios) and quantitative methods to add precision to expected change to the tourism economy, using forecasting techniques and econometric models. There are a number of distinct steps involved in the process of scenario planning, each of which was used to guide this study as highlighted in Table 1.

Consequently, this research involved a number of research stages:

- The writing of a number of scenarios to qualitatively map out the unfolding of a flu pandemic and its impact on Scottish tourism, in association with the SEDH;
- The use of the Moffat model,<sup>10</sup> a scenario model that combines a qualitative approach and a conventional computer general equilibrium model of the Scottish tourism economy. It is able to take account of events that may affect

tourism and 82 economic sectors affecting tourism.<sup>11</sup> Two specific scenarios were produced as shown in summary form in Tables 3–6 to depict the onset of avian flu as a risk for Scottish tourism and the potential economic impact of this event as well as a more profound series of impacts aligned to a flu pandemic developing in Scotland.

The outcome of this process was a series of scenarios that were used to guide the scenario planning process; the results of this exercise have been reported elsewhere in detail together with the likely impacts upon the Scottish tourism economy.<sup>12</sup> It is important to stress from this exercise that the scenarios were tested with industry practitioners and then formed the basis for creating an agenda for organisational planning and management of a pandemic. In other words, the scenario planning tool was the start of the

	Scenario 1:	
	It's out there $(\pounds m)$	Change (%)
GDP	-362	-0.5
Welfare	-306	-0.5
Employment (FTE jobs)	-3,180	-0.2
Government revenue	-82	-0.4
Day trips expenditure	112	4.9
Domestic tourism expenditure	78	4.9
Rest of UK tourism expenditure	170	5.3
International tourism expenditure	-208	-15.2
Domestic plus rest of UK tourism expenditure	248	5.2
Overnight tourism expenditure	40	0.7
Tourism plus day trips expenditure	153	1.8

#### Table 4: Scenario 1: It's out there — Macroeconomic impact

planning process, which facilitated organisational awareness and VisitScotland Board endorsement of the need to plan and prepare for this potential threat to tourism in September 2005. This is fundamental in any form of crisis management if it is to be a robust process, which needs to be supported by the Chief Executive and Board.

Part of this planning process was to also communicate the planning process to the wider Scottish tourism sector via various dissemination conduits such as the world wide web using a summary and full version of the scenario planning results, as well as the major Scottish tourism industry conference in December 2005. At each stage of the planning process, communication was deemed the main issue for the organisation, not just for internal staff, but also the diverse other stakeholders (eg government and the public sector, the tourism industry, the Scottish population and visitors).

## VISITSCOTLAND'S PREPARATIONS FOR A FLU PANDEMIC

After the initial creation and testing of scenarios, and modelling the potential

economic effects of a flu pandemic on Scottish tourism, the scenario planning framework was used to begin a process of organisational development for the pandemic in 2006. This commenced in January 2006 with two workshops to take the scenario planning exercise into a practically focused forum where key internal stakeholders within VisitScotland consulted and brainstormed the issues that a flu pandemic posed for their business. This was followed by a similar exercise for representatives of the Scottish tourism industry represented in the Scottish Tourism Emergency Response Group (STERG). At each of these sessions, the major challenges for Scottish tourism were reviewed and used to create a framework in which a series of crisis management plans could be developed for VisitScotland and STERG group. As an organisation, VisitScotland is part of a wider UK network of tourism agencies (VisitBritain, VisitWales, VisitEngland and the Northern Ireland Tourist Board) and a web of other public sector bodies in Scotland (eg the Scottish Executive, local authorities, industry bodies and businesses represented in STERG). VisitScotland worked in close consultation with both

### Table 5: VisitScotland scenario planning for avian flu: Scenario 2 - It's here

In this scenario, avian flu has mutated into influenza and, consequently, an outbreak has had a devastating effect on the Scottish economy and tourism. The UK Pandemic Influenza Committee does not declare an end to the pandemic until June 2008, when epidemiological indices return to normal levels. The impact on the Scottish economy is a 10 per cent fall in productivity, a 40 per cent reduction in GDP and the loss of over 272,000 FTE jobs over two years. Scotland's tourism, leisure and transport industry have suffered more than others. The Fraser of Allander Institute's economic assessment of the impact of the pandemic on Scottish tourism quantifies the impact at  $\pounds$ 4.9bn per annum. Scotland's international tourism markets are virtually wiped out. The equivalent of nearly 98,000 FTE jobs are lost in the tourism industry.

In this scenario, the following presumptions are made about demand:

- · Long and deep disruption to tourism
- Recovery takes five years
- 30% decline in day trips
- 50% decline in domestic Scottish tourism
- + 60% decline in rest of UK tourism
- 70% decline in short haul tourism
- 90% decline in long haul tourism
- 10% drop in productivity in tourism sectors
- 10% drop in productivity in Scottish economy.

The economic impact of this scenario is described in Table 6.

the Scottish Executive and VisitBritain to create its responses to a flu pandemic with two key guiding principles:

- *Collaboration*, joint working and the creation of 'knowledge economies' were deemed vital, to avoid reinventing the wheel, to avoid claiming sole ownership of the response and to develop practical outcomes that the wider business community could understand and use;
- Developing networks and webs of communication<sup>13</sup> with all the stakeholders to disseminate the knowledge economies and to establish the key areas for integrated action.

In January 2006, two crisis management plans on a flu pandemic were developed for both VisitScotland and STERG. While issues of commercial sensitivity and organisational operations prevent discussion of the intimate detail of these plans, it is possible to outline the following guiding principles that applied to both the VisitScotland and STERG plans.

### **Guiding principles**

The plans needed to be simple, clear and unambiguous and no longer than ten pages in length, setting out the rationale for the plan (Table 7), lines of authority and Chief Executive support and delegation of the plan to a crisis management team. Clear guidelines for the activation of the plan were identified at VisitScotland together with the wider importance of safeguarding the wellbeing of staff, visitors and other stakeholders in the Scottish tourism industry as the lead agency for tourism in Scotland. The plan identified that in the pre-crisis stage, much of the preparations for the pandemic had to be made for effective plans to be put into action. For this reason, the

	Scenario 2:	
	It's there $(\pounds m)$	Change (%)
GDP	-26,841	-38.6
Welfare	-27,727	-43.8
Employment (FTE jobs)	-272,340	-14.8
Government revenue	-4,251	-18.5
Day trips expenditure	-910	-40.0
Domestic tourism expenditure	-763	-47.5
Rest of UK tourism expenditure	-2,042	-59.5
International tourism expenditure	-1,191	-78.6
Domestic plus rest of UK tourism expenditure	-2,805	-55.7
Overnight tourism expenditure	-3,995	-61.0
Tourism plus day trips expenditure	-4,906	-55.6

### Table 6: Scenario 2: It's here — Macroeconomic impact

### Table 7: Objectives of the VisitScotland flu pandemic crisis plan

- To enable VisitScotland to respond as an organisation to the threat and problems which will result from a flu pandemic in Scotland, so it can redefine and redirect its resources towards crisis management tasks internally and externally.
- To inform its staff, clients (businesses and visitors) and the public on the current state of tourism in Scotland in relation to a flu pandemic.
- To seize the initiative as the single authoritative source of information rather than the media leading the crisis and information dissemination.
- To identify the core responsibilities and tasks with which the organisation will be charged during the crisis, such as leadership of the tourism sector.
- To demonstrate human concern for what is happening and to offer advice on appropriate actions for affected businesses.
- To enable tourism in Scotland to function as normal as is possible, without complete suspension of all business activities unless it is deemed necessary.
- To ensure the safety and wellbeing of VisitScotland staff and to advise visitors on the relative safety (within the confines of existing scientific knowledge) of visiting different areas in Scotland.
- To fulfil the needs of the emergency corporate communications plan for a flu pandemic, to remain consistent with the messages from VisitBritain and, where possible, seizing opportunities with the media to contain negative reporting and effects.

following generic actions were identified:

- Monitoring the spread of avian flu and the likely trigger points where it might mutate into a human pandemic.
- What actions were needed to market Scotland prior to a pandemic and

how communications were the major driver of many of the VisitScotland responses either to reassure the public or businesses and their staff.

• The impact of a flu pandemic on travel and transport to/from Scotland and how this might be affected by external factors, such as possible travel advisories

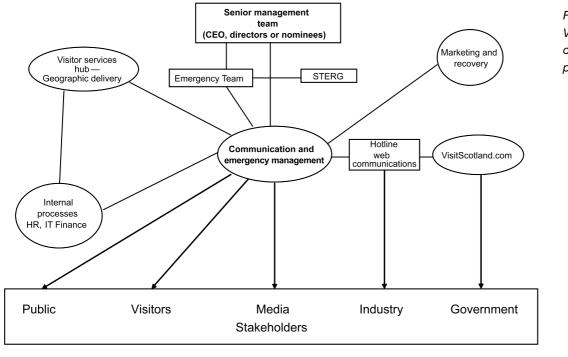


Figure 3 VisitScotland organisation in flu pandemic

prior to a pandemic and the effect on the image of Scotland as a visitor destination (positive and negative), as tourist behaviour is significantly affected by media reporting, imagery and mass media sensationalism. This was apparent in the isolated case of avian flu found in a dead swan in April 2006 in East Scotland, which tested the organisation's crisis management plans and wider preparation for transforming normal business activities to those that are communications-oriented.

- The preparations for human resource planning, including staff requirements, staff awareness and buy-in to the pandemic planning process, and creation of a clear command structure in the event of a pandemic so that staff could work remotely and respond to carer and organisational needs.
- Above all, the ability to create a communications focused organisational structure and response network which

was integrated with other agencies involved in the tourism sector to achieve the goals of collaboration and networks of communication was deemed a high priority, hence the creation of a response framework (Figure 3).

- In the crisis, a number of key managerial decisions by VisitScotland's Chief Executive and Board were required to establish a number of potential operating environments dependent upon the nature and likely impact of a pandemic, which might comprise:
  - Attempting to maintain normal business operations up until a 'tipping point' or external factors lead to reorganisation of the business.
  - Limiting the operation of Head Office functions to core staff to allow business continuity with a limited staff that remains communications-focused.

- Maintaining the VisitScotland network as a remote series of hubs that could have some core functions transferred to maintain business operations temporarily (eg call centre functions).

Having established these possible operational scenarios, a range of similar issues arose in relation to human resource management and filling absent staff posts: the importance of continuous communication with stakeholders and staff, and forward thinking in relation to the recovery stage. At each stage of the potential crisis, communications were deemed vital to keep a consistent message. The core communication tasks in the crisis for VisitScotland therefore include:

- The formation of an emergency hotline to handle all calls to area offices on flu related issues (eg 'is it safe to visit Scotland?') and to act as a clearing house for further advice/actions that may be referred on to STERG or the emergency team.
- The creation of the Flu and Tourism in Scotland website, with links to robust sources and briefings for VisitScotland staff and other bodies.
- The timely response by authorised staff (which may need to be seconded or co-opted during the crisis to manage the demand for information/services) to information requests, the media and industry/visitor requests. To aid the training and development of seconded staff, a set storyline and simple message needs to be generated by the emergency team that will evolve as the crisis develops for consistency and clarity. This will need to be developed from experiences from other countries that have dealt with a flu pandemic.
- The creation of question and answer information for the public and the

media along with rapid response to stories in the media that are factually incorrect or which seek to sensationalise issues (eg during the avian flu case in Scotland, words such as 'plague' and 'quarantine' were used by the media to create a degree of frenzy and interest).

# **FUTURE ACTIONS**

VisitScotland is currently reviewing its pandemic preparedness<sup>14</sup> and looking at the legal issues arising from many of the actions needed to prepare for a crisis, including human resource policies relating to staff absence and illness; the way in which it communicates with its stakeholders; the ability of the organisation to cope in a crisis; the challenge for IT systems; and the ongoing dialogue with other tourism organisations globally, nationally and locally to provide a seamless response from a UK tourism perspective in the event of a flu pandemic. Much of this preparatory work is not specific to a flu pandemic as it is part of the best practice guidelines now being recognised as essential to ensure both business continuity and the organisation's robustness in a crisis. While plans are fine in principle, testing them and the staff's ability to react and manage in a crisis is also vital. In the case of VisitScotland and STERG, a suspected case of avian flu in Orkney in March 2006 and a case in April 2006 readily tested the corporate crisis communication team response, and a number of valuable lessons were learned through an actual scenario developed in 2005 actually coming to fruition in 2006. Among the key lessons were the overriding importance of a communications strategy, the need for prompt cascading of a seamless and harmonised source of information to the tourism sector, typically within hours of a crisis emerging, and preparedness for the eventuality.

Therefore, putting a plan to the test is the best form of critically evaluating its success and failure as well as areas for improvement. Furthermore, prompt feedback from stakeholders and clients is vital, as with STERG in the case of avian flu. However, a flu pandemic is likely to be of a much greater impact than avian flu and so the preparations that organisations need to make are far greater. While many examples of manuals and checklists now exist for businesses in this area (eg the Canadian Manufacturers and Exporters Association has an excellent handbook and guide<sup>15</sup>), these need tailoring to the specifics of particular businesses and sectors.

### CONCLUSIONS

Some cynics will say that a flu pandemic is best treated like the Millennium Bug --something everyone got very worried about but did not actually happen. Unfortunately, a flu pandemic is much more serious than the Millennium Bug. It is still unclear about the timescale of such an event unfolding, but with other global risks such as terrorism now proving to be a challenge for businesses, the process of business continuity planning is a vital step for many organisations in relation to risk assessment and preparations in the event of a major event that interrupts normal business activity. The implications for emergency planning are similarly profound. A flu pandemic would prove to be a major global event that would damage economic activity irrespective of business sector, which is underscored by the measures adopted by national governments in terms of pandemic contingency plans and many large businesses now taking the threat seriously and making their own contingency plans for business continuity. The Global Risks report rates a flu pandemic in the same category as terrorism,<sup>16</sup> which illustrates the severity with which it is being rated as a credible risk, reflected in the contingency plans of major organisations for this risk.

While scenario planning is not an exact science, it can be used in a very constructive manner to help an organisation to clarify and understand the nature of the risks it faces in the global operating environment. VisitScotland has been able to use scenario planning to bring sense to an incredibly complex and multi-dimensional problem that requires a multidisciplinary team able to cross multiple boundaries such as tourism, management science, economics and medicine, as well as recognising the value of networking and communication tools and channels. If anything has been learned from this process, it is that communication will be critical at each stage of a pandemic (before, during and after the event) so that staff and other stakeholders are not only prepared, but understand the nature of what may befall them. Creating crisis plans is laudable, but they are of little use without being tested, critiqued and amended, as the experience of avian flu in Scotland has shown. Tourism is an activity that performs best when it operates in a stable social and economic environment; crises test the confidence of consumers who are making a discretionary purchase and a decision to travel, so planning for and anticipating crises is now a vital role for every NTO.

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#### REFERENCES

(1) It is important to stress throughout this paper that many large multinational organisations and public sector bodies, internationally, have recognised this risk (and some have been issued directives from central government or are required by legislation such as the UK Civil Contingency Act 2004 to prepare for such an eventuality). However, it is the small to medium sized enterprises that may remain very exposed to this risk, as long-term planning horizons are often not possible due to the dominance of operational issues.

- (2) Brownstein, J., Wolfe, C. and Mandl, K. (2006) 'Empirical evidence for the effect of airline travel on inter-regional influenza spread in the United States', *PLOS Medicine*, Vol. 3, No. 10, pp. 1–10.
- (3) VisitScotland (2006) 'Tourism in Scotland', available at: www.visitscotland.org/research (accessed 8th May, 2006).
- (4) World Economic Forum, MME, Merrill Lynch and Swiss Re (2006) 'Global Risks 2006', World Economic Forum, Geneva, Switzerland.
- (5) *Ibid.*, p. 4.
- (6) Yeoman, I., Galt, M. and McMahon-Beattie, U. (2005) 'A case study of how VisitScotland prepared for war', *Journal of Travel Research*, Vol. 44, No. 1, January, pp. 6–20.
- (7) Ibid.
- (8) Ibid.
- (9) Van der Heijden, K. (2003) 'Scenarios: The Art of Strategic Conversation', John Wiley, Chichester, UK.
- (10) Blake, A. (2006) 'The structure of the Moffat CGE model. A discussion paper', available at: http://www. nottingham.ac.uk/ttri (accessed 12th May, 2006).
- (11) The model includes 82 industries and 82 corresponding commodities. These include the tourism-related sectors of large hotels, small hotels, bed and breakfast establishments and guesthouses, self-catering accommodation, caravans and camping, restaurants and catering, transport, recreational services and retail distribution. Within the model, industries pay factors of production in return for factor services, pay taxes and purchase intermediate inputs. Labour is

mobile between sectors but capital is specific to the sector in which it is employed. Labour (in total) and capital in each sector are not fixed in supply, as the 'open' nature of the Scottish economy allows changes in wages (and rental rates of capital) to induce changes in the supply of factors in Scotland. Exports and imports occur for each of the 82 commodities (except where data show these flows to be zero) and are modelled separately for trade with the rest of the UK and the rest of the world. Scotland faces exogenous world prices and imported products are differentiated according to region of origin. Exports are differentiated from goods produced for domestic use.

- (12) Page, S. J., Yeoman, I., Munro, C., Connell, J. and Walker, L. (2006) 'A case study of best practice — VisitScotland's prepared response to an influenza pandemic', *Tourism Management*, Vol. 27, No. 3, pp. 361–393.
- (13) 'Emergency' is the accepted term used to manage public sector planning for events such as a pandemic, although most organisations will normally categorise this activity as crisis management.
- (14) Human resources issues are central concerns for most organisations in a pandemic. A very useful global review of the state of preparedness of organisations in terms of human resources has been provided: Mercer Human Resource Consulting (2006) 'Avian Flu Pandemic Preparedness Survey Report', Mercer Human Resource Consulting, New York, NY, Spring, available at: http://www.mercerHR.com/avianflu.
- (15) Canadian Manufacturers and Exporters (2006) 'Influenza Pandemic: Continuity Planning Guide for Canadian Businesses', Canadian Manufacturers and Exporters, Toronto, ON.
- (16) World Economic Forum *et al.*, ref. 4 above.