



**NOTTINGHAMSHIRE**  
**Fire & Rescue Service**  
*Creating Safer Communities*

Nottinghamshire and City of Nottingham  
Fire and Rescue Authority  
Policy and Strategy Committee

# UPDATED INFORMATION AND COMMUNICATIONS TECHNOLOGIES STRATEGY

Report of the Chief Fire Officer

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**Agenda Item No:**

**Date:** 1 February 2008

**Purpose of Report:**

The purpose of this report is to present the updated Information Communications Technology (ICT) Strategy to Members for approval.

## CONTACT OFFICER

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## **1. BACKGROUND**

- 1.1 At the meeting of the Finance and Resources Committee on 14 December 2007 Members asked for a report to be written by officers setting out the Authority's strategy for Information and Communications Technologies (ICT).
- 1.2 As a result of the changing nature of the Service and its demands on ICT, the Service's ICT Strategy of 2003-2004 has been reviewed and updated to become the "Strategy for ICT 2008-2011".
- 1.3 The scope of the strategy has been extended to include the activities of the Information Systems section, which became part of the ICT department in 2005 and takes account of national and regional influences and initiatives.

## **2. REPORT**

- 2.1 The ICT Strategy is structured in two parts, both of which are appended to this report at Appendices A and B. The first part is the overall strategy and the second a strategy for delivery which feeds into departmental business plans.
- 2.2 The overarching strategy entitled "Strategy for ICT 2008-2011" sets out the objectives and goals, the overarching business strategy for ICT, the management strategy and the technical strategy.
- 2.3 Specifically this section also acknowledges that any policy which results in standardisation must acknowledge issues related to equality where due regard must be given the specific needs of individuals where a standardised approach is not appropriate.
- 2.4 This section also considers the possible environmental impact of equipment purchase and particularly disposal.
- 2.5 The objectives and goals section sets ICT in the overall context of the business of the Fire and Rescue Authority and in particular the aims and objectives of the Authority and the Community Safety Plan 2007-2010.
- 2.6 The overarching business strategy sets out how ICT projects are to be determined and prioritised, along with the funding and resourcing principles. Importantly this section also commits the organisation to operating and managing ICT provision in accordance with best management practices as determined from time to time by the British and International Standards organisations and seeking to maintain the policy of low risk exposure.

2.7 This management strategy deals specifically with:

- Service and activity prioritisation;
- Structure staffing and skill levels;
- ICT delivery and support;
- Performance management .

2.8 The management strategy sets out how the ICT function will be managed within the IT Infrastructure Library (ITIL) Framework which despite its rather unusual title is an international standard for the management of ICT aligned to ISO/IEC 20000.

2.9 The Technical strategy deals with:

- Infrastructure;
- Line of business software;
- Security;
- Business continuity.

2.10 The technical strategy sets out the Authority's position on the acquisition of hardware and software as well as dealing with issues related to security, business continuity and disaster recovery.

2.11 The delivery strategy attached as Appendix B is essentially an internal document which deals with the plans of the ICT Department to implement and adhere to the overall strategy. It sets out under each of the main strategic headings the current position and plans to develop internal processes and procedures to ensure compliance.

### **3. FINANCIAL IMPLICATIONS**

3.1 For a number of years the ICT Capital Programme has been "slipping" and Members of the Finance and Resources Committee were rightly concerned on two counts. Firstly that the programme may have been over ambitious and secondly that the Authority may be exposed to unnecessary risk as a result of not being able to complete ICT projects.

3.2 Within the strategy it is implicit that more "order" must be brought to the way in which ICT projects are financed, not specifically in terms of capital financing, but in terms of generating the capacity required to implement projects. The use of a Steering Board will ensure that ICT projects are properly assessed for viability and benefits before they are included either in the Capital Programme or departmental business plans, as well as ensuring that all the financial implications are clear and managed.

### **4. PERSONNEL IMPLICATIONS**

There are no specific personnel implications arising from this report.

## **5. EQUALITY IMPACT ASSESSMENT**

An equality impact assessment has been undertaken, and concludes that there may have been risks to equalities if the strategy was not flexible enough to cater for the individual needs of both staff and members of the public, who may have specific requirements linked primarily to disability which would inhibit their access to facilities. This issue has been addressed within the strategy. The equality impact assessment is attached as Appendix C to this report.

## **6. CRIME AND DISORDER IMPLICATIONS**

There are no specific implications for crime and disorder arising from this report.

## **7. RISK MANAGEMENT IMPLICATIONS**

7.1 The Authority may be exposed to a range of risks in connection with ICT based activities which relate to:

- Technological risk arising from the use of cutting edge technologies;
- Business Continuity and Disaster recovery for both facilities and data;
- Loss of service due to inadequate maintenance;
- Inability to provide essential services.

7.2 The strategy adequately addresses all of these issues.

## **8. RECOMMENDATIONS**

That Members approve the ICT Strategy for 2008-2011 and the ICT Delivery Strategy for 2008-2011.

## **9. BACKGROUND PAPERS FOR INSPECTION (OTHER THAN PUBLISHED DOCUMENTS)**

None.

Frank Swann  
**CHIEF FIRE OFFICER**



# **NOTTINGHAMSHIRE**

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# **Strategy for ICT 2008-2011**

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## Introduction

As a result of the changing nature of the Service and its demands on Information & Communications Technologies (ICT) the Service's ICT Strategy of 2003-2004 has been reviewed and updated to become the "Strategy for ICT 2008-2011".

The scope of the strategy has been extended to include the activities of the Information Systems section which became part of the ICT department in 2005 and takes account of national and regional influences and initiatives.

With the increasing impact of computing and tele-communications technologies across the entire organization and the need for integration of management and information systems it is recognized that efficient and effective deployment of ICT has to be coordinated according to a set of business principles.

This strategy defines those principles.

In order to render this document more useful to the Service as a whole, a set of concise business principles defined in section 3 form the overarching strategy. This is underpinned in sections 4 and 5 by a number of internal ICT management and technical sub-strategies. The document in its entirety lays out the corporate and department visions, aims and objectives and the principles which are to be applied for their achievement.

The envisaged tasks required to deliver this strategy are given in a separate document (ICT Strategy Delivery 2008-2011) along with each task status.

This strategy will be subject to annual review but may be reviewed at any time should the need arise.

## Objectives and Goals

The Community Safety Plan 2007-2010 charges the organisation with "*Maintaining Efficient and Effective Support Systems for Delivering the Service*" by "*Supporting All Our Employees*" and "*Managing the Service on a Good Business Foundation*"

ICT will play an increasingly important role in the provision of computing and communications technology. With significant changes in operations and structure being planned, ICT is seen as a key component in the development of the information and support services needed by the organisation.

In support of the Aims and Objectives of the Community Safety Plan 2007-2010, the ICT department will:

- Continue to provide computer processing services, computing, peripheral, data- and tele-communications equipment, software systems and supporting business and technical skills to all departments.
- Provide systems development services and business management services where required by the organisation.
- Actively promote equality and diversity within NFRS by ensuring that its employees have the skills and knowledge to deliver services to **all** of NFRS's employees, addressing any possible adverse impact on minority groups via the Equality Impact Assessment process and challenging discriminatory behaviour and maintaining a culture of dignity and respect within its offices and those of its service users.

- Have due regard for environmental issues and will specify, acquire and dispose of electrical and electronic equipment according to the organisation's purchasing and disposal policies.

## **Overarching ICT Business Strategy**

The organisation will:

1. Determine ICT activity priorities through the auspices of an ICT Steering Board.
2. Adopt a policy of consulting with and involving the ICT department on all matters to do with the development of new, or the changing of existing ICT services whether they are to be, or are currently provided by the ICT department or not

The ICT department will:

3. Operate and be managed in accordance with appropriate best practices as determined by the British and International Standards Organisations
4. Maintain a policy of low risk to the organisation and the department's service provision in all of its activities.
5. Be directly funded for the continued provision of existing services whilst capital and revenue funding for new service development or changes to existing services will be identified and funded by the initiating projects.
6. Maintain staffing numbers at a level required for the normal continued provision of existing services. Any additional development staff or resultant increases in ICT service delivery staff as a result of new service development or changes to existing services will be identified and funded by the initiating projects

## **ICT Management Strategy**

Although developed specifically for the provision of IT services, the ITIL (IT Infrastructure Library) Framework for IT Service Management which is aligned to the ISO/IEC 20000 standard provides a sound foundation for the management of all ICT functions and activities. The principles of this standard are to be adopted by the department as a whole albeit certification will not be sought immediately.

### **Service and Activity Prioritisation**

The continued provision of ICT services within agreed Service Levels is considered paramount amongst all ICT activities.

Through the production of, and application to annual business plans, future ICT service capacity and availability issues will be identified, programmed and progressed.

The priority of ICT Service development will be determined by an ICT Steering Board comprised of individual senior managers (area manager or equivalent) representing the interests of the organisation and chaired by the Head of Finance & Resources This board

will meet regularly and will be responsible for assessing the feasibility, desirability and priority of proposed ICT projects against other ICT and business priorities.

## **Structure, Staffing and Skill Levels**

The department is to adopt a structure which best supports the needs of the services it provides.

These needs are grouped into the following functions

***Business Support*** – activities that are performed which are of themselves, the service (e.g. data entry, map production, equipment supply etc.)

***ICT Operations*** – IT and Communications activities that are related to the continued provision of a technical service (e.g. equipment capacity and performance monitoring, data and system backups, repairs and replacements etc.)

***Service Development*** – activities that are performed in the development of new or changing services.

***Service Desk*** – activities that are performed for the registering, recording, resolution and processing of service interruptions and service requests.

Each function is to be staffed with sufficient personnel equipped with the skills and personal attributes necessary to provide their core function. Peak and extraordinary staff and skills demands, as well as service resilience, will be provided through skills cross-over amongst internal staff and where necessary through external providers.

## **ICT Delivery and Support**

The need for ICT support will be minimized, as far as possible, by ensuring robust infrastructure and software, good self-help methods (e.g. documentation, user guides) and appropriate end-user training and literacy programmes. We will minimise the need for support personnel to travel by utilising the combination of the telephone and remote PC support facilities.

Telephone support will be provided in accordance with appropriate and specific Service Level Agreements. Technicians will travel to sites when remote support fails and the matter is urgent or when on-site presence is essential (e.g. installation of new equipment).

A combination of in-house, multi-skilled, appropriate level resources will be used for first line ICT support, administration and project coordination and external resources will be used for more technical or specialised support and project delivery.

## **Performance Management**

Department and service performance will be monitored and adjudged through the design and implementation of a suite of Local Performance Indicators. These will be reported on regularly to the ICT management team, the ICT Steering Board, and the Performance and Co-ordination Team (PaCT) as appropriate.



# ICT Technical Strategy

## Infrastructure

This strategy complies with principles set out in the ODPM's (now CLG) "Fire and Rescue Service ICT Infrastructure; Roadmap for Delivery" and with those principles required of us in order to successfully join up with national project infrastructures.

Where firm, national or regional specification and purchasing arrangements are in place (e.g. FireBuy OGC) and where they are supported by the financial regulations of the organisation, they will be utilised.

In addition, ICT components, hardware and software shall:

- i. Be tried and tested (not pioneering)
- ii. Be of a common established manufacturer where practical
- iii. Be legally licensed
- iv. Keep pace with technology to the extent that is prudent
- v. Properly meet the needs of the organisation.
- vi. Not compromise the security and safety of the organisation or its employees.
- vii. Represent best value
- viii. Enable the requirements of all relevant legislation to be met

## Line of Business Software

A formal methodology for the selection and acquisition of applications software will be followed.

Where firm, national or regional specification and purchasing arrangements are in place for software (e.g. via FireBuy or a mandated product such as FSEC) and where they are supported by the financial regulations of the organisation, they will be utilised.

Where similar requirements have already been addressed by our regional Fire & Rescue Service neighbours, those solutions will be adopted by the organisation where appropriate and practicable.

Where similar requirements are also needed by our regional Fire & Rescue Service neighbours, a joint or regional approach will be adopted by the organisation where appropriate and practicable.

## Security

In order to protect the organisation's information and equipment assets, the ICT department will aspire to compliance with the Code of Practice for Information Security Management as specified within the ISO/IEC 27002:2005 standard.

## Business Continuity / Disaster Recovery

To underpin the development and delivery of the ICT Strategy, and in line with the ISO/IEC 27002:2005 standard, appropriate ICT Business continuity Plans will be developed and tested. The ICT Business Continuity Planning process will be based upon a practical approach, combining measures to reduce risk, and plans for unforeseen circumstances. Plans will be developed for each Service Delivery Critical System (e.g. Command and Control, Radio System, Telephone System), and the Non-Critical Systems (e.g. Finance, Personnel, Fleet, E-Mail), together with plans for the loss of facilities such as Headquarters and other sites critical to the delivery of ICT Services. ICT Business Continuity planning will take place in cooperation with organisational Business Continuity planning.

Any change to services or any of the component parts (including staff) which go to provide that service will be reviewed for impact on the Business Continuity/Disaster Recovery Plans which will be amended accordingly.



# NOTTINGHAMSHIRE

## Fire & Rescue Service

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# ICT Delivery Strategy 2008–2011

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## Introduction

The Strategy for ICT 2008-2011 defines the business principles which are to be adopted by the organisation in its utilisation of ICT and underpins these principles with a number of ICT Management and Technical sub-strategies.

This document defines the tasks and principle definitions which are to be applied for the delivery of the Strategy.

These principles and sub-strategies are given as follows:

### Overarching Business Strategy

- ICT Steering Board

- ICT Service Usage

### ICT Management Strategy

- Service and Activity Prioritisation

- Structure, Staffing and Skill Levels

- ICT Delivery and Support

- Performance Management

### ICT Technical Strategy

- Infrastructure

- Line of Business Software

- Security

- Business Continuity / Disaster Recovery

Subject to annual or extraordinary review, the Strategy itself will remain unchanged as long as it serves the needs of the organisation. The tasks required to deliver the Strategy and the operating principles and definitions given in this document may change where differing technical, regulatory or business influences present themselves.

# Overarching ICT Business Strategy

## ICT Steering Board

- Activity** An ICT Steering Board is to be established which will determine ICT activity priorities. Terms of Reference, Membership, and Meeting Frequency are to be determined along with a Prioritisation Methodology to allow this board to function.
- Status** Proposed in a Strategic Management Team (SMT) paper “A Way Forward for Information and Communications Technology” in December 2007, this has been approved in principle by SMT.

## ICT Service Usage Policy

- Activity** An ICT Service Usage Policy is to be written to define the services provided by and the responsibilities of the ICT department. This policy will incorporate the processes and channels to be used by the organisation for communicating ICT incidents (problems) and service requests to the department. It will further define when the organisation should consult with the department when considering changes to ICT managed services.
- Status:** Much of the content of this emergent document is already in practice but is not enshrined in policy. This policy will be developed in accordance with the organisation’s draft, consult approve and adopt process currently in place.

## Best Practice

### Information Technology Infrastructure Library (ITIL)

- Activity** The adoption of the Office of Government Commerce (OGC) ITIL standard as enshrined by ISO/IEC 20000 is an ongoing process. ITIL presents a series of management processes and activities which form an environment of continuing improvement within a service department. The ICT department is to adopt these processes and principles across all its disciplines by raising awareness among all staff members of ITIL and will develop a programme for achieving ITIL compliance.
- Status:** Some work has already been undertaken in order to achieve ITIL compliance. The Head of ICT and the IT Manager have received training on this standard and have begun the process of drawing up the programme. ICT staff awareness needs are to be identified and resolved.

### Code of Practice for Information Security Management

- Activity:** Develop knowledge of the Code of Practice for Information Security Management (ISO/IEC 27002:2005) and import its recommendations into the department’s and the organisation’s policies and procedures
- Status;** New activity – not yet embarked upon

## Maintain a Low Risk Policy – Principle Definition

*In line with the organisation's low risk appetite, the department will minimize risk to the organisation and the established ICT services in all its activities. Activities will be prioritized according to business advantage and business risk profiles and these priorities will remain under the control of the ICT Steering Board*

## Funding Scope - Principle Definition

*The ICT department will be responsible for identifying its own budgetary needs to maintain its established services as defined in Service Level Agreements (SLAs). Funding necessary for the development of additional, or amending of existing services will be identified and acquired by the owner of the development (project sponsor or department head) and will be kept under the control of the ICT department. Any increase in revenue funding necessary for the running of new services or the expansion of existing services will be identified and acquired by the owner of the development and will also be kept under the control of the ICT department*

## Additional Staffing Scope – Principle Definition

*The ICT department will be responsible for identifying its own staffing needs to maintain its established services as defined in Service Level Agreements (SLAs). Additional staff necessary for the development of additional, or amending of existing services will be identified by the owner (project sponsor or department head) of the development in conjunction with the ICT department. The acquisition, management and deployment of such staff will be kept under the control of the ICT department. Any increase in staff levels necessary for the running of new services or the expansion of existing services will be identified by the owner (project sponsor or department head) of the development in conjunction with the ICT department. The acquisition, management and deployment of such staff will be kept under the control of the ICT department.*

## **ICT Management Strategy**

The department is to be managed according to the tenets of ITIL (see 2.3.1 above)

### **Department Structure**

Action: Redefine the department structure, redefine and evaluate staff roles and responsibilities

Status: Proposed in a Strategic Management Team (SMT) paper "A Way Forward for Information and Communications Technology" in December 2007, a new structure has been approved by SMT. Revised staff job descriptions will be produced in preparation for the emergent ICT Service Usage Policy (see 2.2 above).

### **ICT Delivery and Support**

#### **Documentation**

Action: Define, prepare and publish via the organisation's intranet, a comprehensive set of ICT user guides and operating instructions

Status: New activity – not yet embarked upon.

#### **Extended Support**

Action: Establish Service Level Agreements (SLAs) and Incorporate extended support rota requirements into staff job descriptions

Status: An interim extended support facility is currently in place. This will be replaced once the SLAs have been introduced.

### **Performance Management**

Action: Define and design a suite of Local Performance Indicators along with processes and procedures for their preparation, reporting and reviewing.

Status: New activity – not yet embarked upon.

# ICT Technical Strategy

## Infrastructure Management

### ICT Infrastructure – Principle Definition

Because of the size and nature of the ICT Operations section it is necessary to keep the number of different skills needed to maintain services to a minimum.

It is also deemed, for resilience purposes that tele-, data- communications and computing equipment and computer infrastructure software employed will be from a proven, industry leading manufacturer.

***Any communication equipment, computer equipment and infrastructure software which is to be used in the ICT infrastructure will only be from manufacturers recorded in the Preferred Manufacturers Register. This register is part of the Configuration Management database and will be subject to the internal ICT Change Control processes.***

***As a principle, emergent or leading edge technical solutions will not be used for the provision of ICT services – deviation from this principle will only be allowed under direction of the ICT Steering Board***

### Software License Management – Principle Definition

The organisation recognizes and is committed to its responsibilities regarding software licensing.

***Only officially acquired, fully licensed software will be installed on any of the organisation's computers and will only be installed by the IT section. This principle will always apply.***

### Line of Business Applications

**Activity**            A Line of Business Applications Software Selection Policy is to be written. This policy will define the rationale and processes necessary for successful selection and acquisition of computer software.

**Status:**            Much of the content of this emergent document is already in practice but is not enshrined in policy. This policy will be developed in accordance with the organisation's draft, consult approve and adopt process currently in place.



## **Security**

The IT section is to manage all aspects of infrastructure and data security according to the tenets of the Code of Practice for Information Security Management (ISO/IEC 27002:2005) (see 2.3.2 above)

Activity: Acquire knowledge of this code of practice and develop a roadmap for adoption

Status: Not yet embarked upon

## **Business Continuity / Disaster Recovery**

Activity: An ongoing process, work will continue to improve resilience for all services in line with the Service Level Agreements which are being developed as part of the ITIL program. A complete disaster recovery plan is to be developed which will enable services to be restored and recovered in the event of major catastrophe to the ICT infrastructure

## INITIAL EQUALITY IMPACT ASSESSMENT

Appendix C

<b>Section</b> ICT	<b>Manager</b> Neil Timms	<b>Date of Assessment</b> 15 January 2008	<b>New or Existing</b> Revision
<b>Name of Report to be assessed</b>		Updated ICT Strategy	
1. Briefly describe the aims, objectives and purpose of the report.		To set the Strategy for ICT for 2008-2011	
2. Who is intended to benefit from this report and what are the outcomes?		The Authority as a whole.	
3. Who are the main stakeholders in relation to the report?		The Authority, Staff, Members of the public, Elected Members	
4. Who implements and who is responsible for the report?		Head of Finance and Resources	

5. Please identify the differential impact in the terms of the six strands below. Please tick yes if you have identified any differential impacts. Please state evidence of negative or positive impacts below.

<i>STRAND</i>	Y	N	<i>NEGATIVE IMPACT</i>	<i>POSITIVE IMPACT</i>
Race		N		
Gender		N		
Disability	Y		Possibility of access difficulties if a rigid standardisation is enforced.	This issue acknowledged and provided for within the strategy
Religion or Belief		N		
Sexuality		N		
Age		N		

6. Can this adverse impact be justified on the grounds of promoting equality of opportunity for one group?	Y	N	7. Should the policy/service proceed to a full impact assessment?	Y	N
		N			

**I am satisfied that this policy has been successfully impact assessed. I understand the impact assessment of this policy is a statutory obligation and that, as owners of this policy, we take responsibility for the completion and quality of this process.**

Signed (completing person).....Neil Timms.....

Date 15/1/2008.....