Strategic Developmental Review of Health Board
Food Control Laboratories: Summary Document
A message from the chairperson, Dr. Mary O’Mahony

Good food is important for our well-being. Without it, there is a real threat of disease as well as a threat to our prosperity. People are now very interested in the quality and safety of food. This is partly due to food scares as well as a developing international food market.

The Department of Health and Children has ten food safety laboratories and although but one element in the wider food safety analytical service framework, these accredited official laboratories play a key role in protecting the public’s health, by analysing the microbiological and chemical content of food so that it is safe to eat. In recent years there has been a considerable investment in these laboratories so that the country now has a highly professional and enthusiastic workforce committed to food safety.

Constant watchfulness is needed to protect the public from foodborne disease. We have learned that food related problems can suddenly appear and cause major problems. With this in mind the Department commissioned this report by safefood to help with ensuring the on-going development of services to protect the public. A Strategy Review Group was set up and members were greatly helped by the input from staff and users of laboratory services.

The Group sought to address two particular concerns; the need to secure an on-going high quality and responsive service as well as the need for fast and responsive communication between different laboratories. The Group was also aware of the need that our recommendations should produce an efficient and cost-effective solution.

The report recommends the concept of a single laboratory service on several sites, with advice on the processes and structures that would assist its delivery. The Group considers that these recommendations will result in a more public health focused analytical service in which the public can have confidence.

It has been a personal pleasure for me to have worked with members of the Strategy Review Group. Their commitment to the task was exemplary and I thank them for their hard work and for their contribution to the final consensus. We are also grateful to Mr Noel Usher and his senior colleagues in the Department of Health and Children, whose willingness to facilitate our work was both generous and open. We were provided with an excellent and dedicated secretariat – Ms Sinead Guckian, Dr. Gary A. Kearney and Dr. Thomas Quigley.

Dr. Mary O’Mahony
Chairperson, Strategy Review Group, July 2004
Food safety monitoring in Ireland

In Ireland, there are ten statutory designated Health Board Food Control Laboratories located on nine sites. These are:

- Three Public Analyst’s Laboratories (PALs), carrying out chemical testing of food; based in Cork, Galway and Dublin.
- Seven official Food Microbiology Laboratories (OFMLs), carrying out microbiological examination of food; two are based in Dublin (one is part of the Dublin PAL) with others in Waterford, Cork, Limerick, Galway and Sligo.

These accredited health board laboratories test food for compliance with the relevant legislation and guidelines, identify food-borne hazards and participate in Food Safety Authority of Ireland (FSAI) surveys and disease outbreaks. They also provide essential risk assessment information for national and international needs, and provide both a food testing service for consumers and a water testing service on a national basis.

Reviewing the services

For several years, the laboratories have been collaborating as a group, to provide a service that is focussed on national needs and aligned with EU legislation. To accomplish this, a considerable investment has been made in staffing, resources, equipment and accommodation. This has resulted in increased capacity and output, and an extended range of analytical services. To keep pace with the constantly changing food safety arena and building on the current arrangements, it is important to identify outstanding issues, to ensure that the laboratories can combine their efforts in an even more coordinated and cohesive way. The Strategy Review Group was also mindful that any recommendations should be compatible with the policy objectives of the Health Service Reform Programme.

Who was involved?

The Department of Health and Children (DoHC) set up a Strategy Review Group, made up of representatives from the laboratories, the DoHC, health board administration, health board departments of public health and the Food Safety Authority of Ireland. safefood, the Food Safety Promotion Board, acted as the secretariat and coordinator to this group.

What were they asked to do?

The Review Group were asked “To consider the operations of the Public Analyst Laboratory and Food Microbiology Laboratory Services in the Republic of Ireland and propose a cost effective strategy for the development of the laboratory services in view of their food safety and food law responsibilities.” The Terms of Reference were elaborated by the DoHC to:

1. consider the legislation with regard to the functions and responsibilities of laboratories;
2. review the current position with regard to legislative obligations, accreditation, laboratory specialisations, research activities, staff training, survey work and laboratory capacities;
3. review the facilities and resources of the laboratories;
4. identify the needs of food safety agencies in terms of their laboratory requirements;
5. examine the factors which influence the effectiveness of the present arrangements and to recommend measures to improve them;
6. assess current arrangements for rapid access to laboratory test data;
7. report on collaboration between laboratories and the need for enhanced scientific co-operation and laboratory linkages.

How did they do it?
Between January 2003 and February 2004, the Strategy Review Group reviewed the working practices of all ten laboratories. A detailed survey was used to gather initial information from all the laboratory managers and an in depth written and verbal consultation process ensured that the views of all interested parties was taken into account. Laboratory staff were also invited to a one-day forum to meet the Group and Department officials, and the Review Group made several visits to facilities, including laboratories and food safety agencies in other countries.

What were the findings of the strategic review?
By examining working practices across the laboratories, it was possible for the Strategy Review Group to identify ways to improve coordination and effectiveness. This resulted in a series of recommendations:

Recommendations

**Single Laboratory Service**
- To provide a fully co-ordinated and cost effective national laboratory service, the laboratories should be combined into a unified, multi-sited and official Food Safety Laboratory Service (FSLS) that provides a microbiological and chemical food analytical service.

**Management of the Food Safety Laboratory Service**
- Individual laboratories will continue to be managed locally but the operational control and direction of the unified Food Safety Laboratory Service would reside with the Health Service Executive (HSE). HSE control and direction is critical to the success of the integrated Service. The HSE will require stakeholder and expert advice on the strategic direction of the Food Safety Laboratory Service:
  - A permanent Food Safety Laboratory Advisory Committee (FSLAC) should be established to advise the HSE on strategic policy and operational direction of the unified Food Safety Laboratory Service.
  - The recruitment of a HSE senior scientific laboratory co-ordinator with overall responsibility for the co-ordination of the FSLS taking account of national strategy planning advice. The co-ordinator will help ensure the delivery of a cohesive and accountable service while driving forward national standards, specifications and outputs.
  - In the reformed health service, individual laboratories will be managed by different Regional Health Offices and the National Hospital Office. To ensure transparent accessibility of HSE-allocated funding for food testing, it is recommended that an internal HSE protocol between the three pillars of the reformed Health Service be established.

1 Please see figure 1.
FUNDING
A number of issues relating to funding were identified, such as inconsistencies between Health Board funding management, ineffective budgetary mechanisms and insufficient dissemination of budgetary information.

• To ensure value for money, the unified FSLS should have a ring-fenced budget with transparent accountability. Laboratory managers should be informed of their annual allocations at the start of the year and appropriate financial management systems should be implemented to cost all analytical activities. Local and Regional Health Offices should provide details of annual operational plans and financial provisions for their food laboratory service and it is necessary to develop guidelines in relation to private work.

LABORATORY FACILITIES
The standard of laboratory accommodation varies significantly.

• Laboratory accommodation should be reviewed by the HSE including the requirement for containment level 3 facilities.
• The FSLS should consider the common procurement of consumables.

STRATEGIC PLANNING
To assist the FSLS in planning future operational food analytical activities, there is a need for a documented strategic approach that will indicate the optimum level of service that the FSLS will be expected to provide.

• It is recommended that the FSLS and stakeholders develop a structured strategic approach to operational planning which would encompass annual business plan cycles.

LEGISLATION
Laboratories working at the coalface of enforcement are in a position to provide advice and expertise in the preparation of legislation.

• As laboratories have an important role in the implementation of food law, the FSLS should continue to be consulted and have an input in the preparation and implementation of relevant legislation.
• In order to provide a quality national laboratory service, the FSLS should continue to be supported to maintain and develop mandatory accreditation to internationally agreed standards.

INFORMATION SHARING
The collection, collation and analysis of laboratory data is necessary in order to ensure that resources are allocated to the most appropriate areas of food-related public health significance and to assure consumers of the safety and hygiene of the food supply. The current arrangements for access to test data are not ideal.

• Appropriate electronic data management systems should be quickly established to ensure data management and timely transfer for public health and food control purposes.
• Information sharing and exchange is critical to the development of a well co-ordinated network. National surveys should be strengthened. Laboratory information should be readily accessible and should continue to be integrated in a timely manner with human and animal disease surveillance data.
Staffing and Training
It is important to ensure that there is an attractive career structure in place for laboratory staff. There are anomalies in grading and access currently within the FSLS.

- Staffing anomalies of the laboratory service as a whole should be reviewed as a priority. The filling of approved vacancies should be expedited appropriately. A new promitional grade of ‘Senior Executive Analytical Chemist’ should be introduced into the service’s PALs.

To develop and deliver this quality service, staff training and development is critical. Generally training provision varies and can be limited.

- The FSLS should establish a robust training framework with a dedicated annual training budget that is operational at local level.

Analytical Activities
The range, appropriateness and amount of work undertaken by laboratories were considered.

- Standard national protocols for the FSLS should be developed specifying the analytical parameters to be tested. Analytical activities should be continually reviewed to account for risk based analysis and public health significance. Rapid screening techniques should be introduced where appropriate, and the export certification process reviewed.

Specialisations
One of the key areas in which the cost effectiveness of the FSLS could be maximised is in the rationalisation of specialisations so that centres of expertise could be established.

- Specialised testing capacities should be further developed on a national basis within the Service.

Applied Research and Development
An effective way to provide an ongoing, robust and rapid response to food alerts and emergencies is to develop an adequately resourced capability for applied R&D.

- The FSLS should be facilitated to develop an adequately resourced capability for developmental applied research on a nationally co-ordinated basis.

Sampling
To ensure that the FSLS is as effective as possible there must be close collaboration between the laboratories and clients. There are currently some cross-functional weaknesses including food sample selection and prioritisation.

- These issues should be reviewed to ensure they are risk based and optimally selected.

Accessibility
The ability of the FSLS to effectively and rapidly respond to food alerts and emergencies is of paramount importance but this is currently fragmented nationally.

- Laboratory operational times should be expanded to provide a more client focused and risk-based service, and an out of hours Service-wide agreement should be put in place together with appropriate access to reference facilities.
Scientific co-operation and laboratory linkages

There is also a need to introduce an international dimension to the FSLS's scientific endeavours.

- It is recommended that the FSLS be facilitated to develop close international cooperation and interaction with official laboratory agencies across the EU.

The unified Food Safety Laboratory Service at a glance

The new unified Food Safety Laboratory Service will be under the aegis of the HSE but will be administered locally by pillars of the HSE. Within the HSE, there will be a single scientific laboratory co-ordinator, with responsibility for overall coordination of the Service who will be advised by a Food Safety Laboratory Advisory Committee (FSLAC; representing all stakeholders including laboratories, Environmental Health Service, regional health offices, public health professionals and food safety agencies). FSLAC will deliver strategic planning advice to the HSE, to shape the future of the FSLS as a whole, in order to address the health and welfare of all. It will give guidance on future specialisations and the R&D required within the Service and will provide representation to national and international committees. The new structure is outlined in more detail in figure 1.

Figure 1: The proposed new structure. This schematic outlines the anticipated reporting relationships, reflecting the proposed formal management and accountability structures. The current links between all stakeholders including the FSAI and laboratories will be maintained.