

COMPARING GLOBAL FOOD SAFETY INITIATIVE (GFSI) RECOGNISED STANDARDS

A DISCUSSION ABOUT THE SIMILARITIES AND DIFFERENCES BETWEEN THE REQUIREMENTS OF THE GFSI BENCHMARKED FOOD SAFETY STANDARDS

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AUTHORS

Supreeya Sansawat Global Food Business Manager, SGS

Victor Muliyil Technical Manager for North America Food Safety Services, SGS



ABSTRACT

This document aims to provide an overview of the Global Food Safety Initiative (GFSI) and what it means for an international food safety standard to be GFSI approved. It then goes on to discuss each of the GFSI approved schemes individually looking in detail at the key schemes which are offered by the Global Food Standard (BRC), FSSC 22000, the International Features Standard Food (IFS Food), the Safe Quality Food SQF 2000 and 1000 and the GlobalG.A.P.. For each of these, the requirements, benefits and certification processes are reviewed. There are five further schemes that are covered in brief. The most generic of the schemes and those most commonly adopted by branded goods manufacturers (FSSC 22000, BRC, SQF 2000 and IFS) are then compared, by discussing the criteria, similarities and differences between the schemes. The paper then looks at the merits of a customised single food audit. This could be of benefit because food safety standards have an extensive crossover with environmental, health & safety and quality standards. A further issue is that there is not necessarily one 'optimal fit' food safety standard for any given organisation. This means that a combination of schemes brought together in one audit procedure may be a more suitable solution.

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I. EXECUTIVE SUMMARY

Retailers, manufacturers, foodservice operators, caterers, industry associations, technical experts and governments all have one thing in common when it comes to food safety. They recognise that consumers' confidence dropped to an all time low after a number of public food scares sent shock waves through the industry just over ten years ago. As with many industries, this widespread concern for safety prompted action. Retailers began to audit their suppliers so that they could feel confident in their suppliers' abilities to meet their food safety system demands. This meant that suppliers often found themselves being repeatedly audited by individual retailers, creating a massive duplication of audit procedures.

The industry soon came together to look at what could be done to improve the situation and reduce the strain on suppliers while maintaining the required safety levels. While consumers needed a reassurance that the food they were purchasing and eating was guaranteed as safe for consumption, the unnecessarily repetitive audits needed to be reduced. Due to food supply chains stretching across the globe it was important that any industry solution covered both the end-to-end supply chain and influenced the industry on an international scale. As a result of all these combined issues, the Global Food Safety Initiative (GFSI) was developed.

All interested parties around the world joined forces to support the creation of a benchmarking and approval scheme that would lay the foundations for an industry-wide expectation in terms of food safety management system deliverables. This became the benchmark against which all food safety standards can be tested, in order to verify that the standard gained by an organisation was in fact proving that they produce or handle food at the level of safety specified.

Holding a GFSI approved certification is fast becoming an industry standard as more and more organisations within the industry are expecting entire supply chains for a given product to prove this capability. Organisations audited and certified through a GFSI approved scheme increase their chances of being a chosen supplier to retailers and/or manufacturers who demand their suppliers hold a GFSI approved certification. The vision of the GFSI benchmark - "once certified, accepted everywhere" - is moving in the direction of being realised, both across the industry and across the world. With a number of international GFSI approved food safety standards now available competitive suppliers are already certificated, seeking certification or developing their processes and identifying the best certification scheme for their organisation. The hope is that as certification becomes even more widespread consumer confidence will be fully restored and food scares will remain a thing of the past.

II. THE GLOBAL FOOD SAFETY INITIATIVE (GFSI)

The Global Food Safety Initiative (GFSI) was originally set-up as a result of food safety scares in early 2000. Its primary purpose is to ensure the safety of food reaching all consumers internationally, but it also aims to develop efficiencies, promote transparency, guide cost savings and become a platform for continuous improvement in the area of food safety. It does this by leading the global food industry towards a harmonised approach to food safety management systems.

Before the GFSI was established, retailers and major buyers across the food industry demanded specific food safety requirements for particular products. To prove that these requirements were met food suppliers often had to have a number of different audits of their premises and systems, a process that cost them time and money. From audit to audit there was also considerable duplication.

This issue was dealt with, to some extent, by the industry developed national and regional schemes, such as the BRC or the IFS Food standards. While these did aggregate the needs and demands of some buyers, there remained many instances of suppliers being audited through numerous processes. As a result of this continued duplication of audits the GFSI set out to develop a uniform structure for food safety standards. It did this by detailing food safety criteria that should be incorporated and putting common procedures in place for accreditation and certification bodies, which verified the implementation of standards.

With this approach the GFSI aims to deliver on its mission to: "Provide continuous improvement in food safety management systems to ensure confidence in the delivery of safe food to consumers worldwide". In order to do this effectively, it operates with four major objectives in mind:

- Reduce food safety risks by delivering equivalence and convergence between effective food safety management systems
- Manage cost in the global food system by eliminating redundancy and improving operational efficiency
- Develop competencies and capacity building in food safety to create consistent and effective global food systems
- Provide a unique international stakeholder platform for collaboration, knowledge exchange and networking

The GFSI is run by the Consumer Goods Forum, which brings together CEOs and senior management from 650 retailers, manufacturers, service providers and other stakeholders across the food industry. Covering all areas in terms of both products and international locations the Forum is considered to be truly representative of the needs of the industry as a whole.

Under the guidance of the Forum, governance of the GFSI is undertaken by a Board, various Technical Working Groups and a Stakeholder Group. While the Board sets the strategic direction and oversees the GFSI on a daily basis the Technical Working Groups provide technical expertise and advice. The Technical Groups combine to form a Technical Committee composed of retailers, manufacturers, food service operators, standard owners, certification bodies, accreditation bodies, industry associations and other technical experts. The GFSI Stakeholder Group brings retailers, manufacturers, certification bodies, accreditation bodies, standards owners, food safety experts and consultants together in a forum to discuss issues related to the GFSI.

All these interested parties have worked together to develop the GFSI Guidance Document. This multi-stakeholder document sets out the requirements for food safety management schemes and provides a framework against which these schemes can be benchmarked. It brings together three key elements of food production:

- Food Safety Management Systems
- Good Practices and HACCP Requirements (GAP, GMP, GDP)
- Requirements for the Delivery of Food Safety Management Systems

ELEMENTS OF ALL GFSI RECOGNISED SCHEMES



Source: GFSI: Enhancing Food Safety Through Third Party Certification

In June 2007 the GFSI achieved a major breakthrough, which has since augmented its beneficial role in international food safety. At that time seven major food retailers all agreed to reduce duplication in the supply chain through the common acceptance of any of the GFSI benchmarked schemes. Carrefour, Tesco, Metro, Migros, Ahold, Wal-Mart and Delhaize pathed the way for the future growth in acceptance of GFSI approved schemes and with that started the GFSI off in the direction of achieving its vision of 'once certified, accepted everywhere'. Subsequently, many other food retailers and manufacturers have agreed to recognise the GFSI benchmarked schemes. These include, among others: Asda; Campbells; Cargill; The Coca Cola Company; ConAgra Foods; Coop; ICA; Kroger; and Sodexo.

III. GFSI RECOGNISED FOOD SAFETY SCHEMES

There is currently a range of manufacturing schemes, primary production schemes and combined schemes that have been benchmarked and approved by the GFSI. Each varies in terms of the scope and criteria covered, as well as in structure, the certification process, validity and the reporting and management conducted.

Each standard has a different structure and procedures for meeting each of the three main areas of requirements:

- The Food Safety Management System
- Good Manufacturing Practices, Good Distribution Practices and Good Agricultural Practices
- Hazard Analysis and the Critical Control Point (HACCP)

Here we take a look at each of the schemes individually:

MANUFACTURING SCHEMES

Global Food Standard (BRC)

The BRC (British Retail Consortium) is the leading trade body for UK retailers. Whether a retailer is a large multiple or department store, or a small independent shop, the BRC protects their interests. The BRC has developed a set of Global Standards, which are international product safety and quality certification programmes that currently certify suppliers in more than 100 countries. Retailers and manufacturers around the world use the BRC standards as their chosen approved standards for suppliers.

The BRC covers the supply chain with four related standards:

- BRC Global Standard for Food Safety
- BRC Global Standard for Storage and Distribution
- BRC IOP Global Standard for Packaging and Packaging Materials
- BRC Global Standard for Consumer Products

The BRC Global Standard for Food Safety was developed with the objective of specifying the safety, quality and operational criteria required for food manufacturers to comply with regulations and protect consumers. All companies involved in the end-to-end supply chain are required to have a clear understanding of the products they produce and distribute and have the systems in place to identify and control food safety hazards.

The Requirements

The major requirements of the BRC Standard are as follows:

- Senior Management Commitment
 - Senior Management Commitment And Continual Improvement
 - Organisational Structure, Responsibilities And Management Authority
- The Food Safety Plan HACCP
 - The Haccp Food Safety Team Codex Alimentarius Step 1
 - Prerequisite Programmes
 - Describe the Product Codex Alimentarius Step 2
 - Identify Intended Use Codex Alimentarius Step 3
 - Construct a Process Flow Diagram
 Codex Alimentarius Step 4
 - Verify Flow Diagram Codex Alimentarius Step 5
 - List All Potential Hazards Associated with Each Process Step, Conduct a Hazard Analysis and Consider any Measures to Control Identified Hazards – Codex Alimentarius Step 6, Principle 1
 - Determine the Critical Control Points (CCP) – Codex Alimentarius Step 7, Principle 2
 - Establish Critical Limits for each CCP – Codex Alimentarius Step 8, Principle 3
 - Establish a Monitoring System for each CCP – Codex Alimentarius Step 9, Principle 4
 - Establish a Corrective Action Plan

 Codex Alimentarius Step 10,
 Principle 5

- Establish Verification Procedures
 Codex Alimentarius Step 11, Principle 6
- HACCP Documentation and Record Keeping – Codex Alimentarius Step 12, Principle 7
- Review the HACCP Plan
- Food Safety & Quality Management System
 - Food Safety & Quality Manual
 - Documentation Control
 - Record Completion and Maintenance
 - Internal Audit
 - Supplier and Raw Material Approval and Performance Monitoring
 - Specifications
 - Corrective Action
 - Control of Non-Conforming Product
 - Traceability
 - Complaint Handling
 - Management of Incidents, Product Withdrawal and Product Recall
- Site Standards
 - External Standards
 - Security
 - Layout Product Flow and Segregation
- Building Fabric
- Utilities Water, Ice, Air and Other Gases
- Equipment
- Maintenance
- Staff Facilities
- Chemical & Physical Product Contamination Control
- Foreign Body Detection and Removal Equipment
- Housekeeping & Ygiene
- Waste/Waste Disposal
- Pest Control
- Storage Facilities
- Dispatch & Transport

- Product Control
 - Product Design/Development
 - Management of Allergens
 - Provenance, Assured Status and Claims of Identity Preserved Materials
 - Product Packaging
 - Product Inspection and Laboratory Testing
 - Product Release
- Process Control
 - Control of Operations
 - Quantity Weight Volume & Number Control
 - Calibration & Control of Measuring and Monitoring Devices
- Personnel
 - Training
 - Personal Hygiene
 - Medical Screening
 - Protective Clothing

The Benefits

There are a number of benefits for manufacturers who are certified against the BRC Standard. A number of these benefits apply across other standards while some are specific to the BRC Global Standard for Food Safety, including:

• The BRC standard has descriptive requirements for process and hygienic control which provide clear

guidelines as to how food safety should be addressed

- It has a simple certification process which only requires an on-site audit (there is no requirement for a desk study step)
- It includes an option of an enrolment audit for sites working towards the full standard
- It includes the option for voluntary unannounced audits to show your high level of commitment to food safety and quality
- Re-certification audits have to be done within a fixed timescale to ensure continuous certification
- The standard has a focus on quality, food safety and legality

The Certification Process

The BRC certification process consists of four steps:

- Step A Manufacturers are provided with a proposal based on the size and nature of their organisation. They can then proceed with the audit by accepting the proposal from the certification body.
- Step B There is then an optional 'pre-audit' stage, which is often useful in identifying any weaknesses in systems and in building confidence before the formal audit.

• Step C – The formal audit is an onsite audit. All parts of the site and process covered in the scope are assessed to determine compliance with every clause of the standard.

Manufacturers receive a Corrective Action Report at the end of the formal audit, identifying any observed nonconformities. Depending on their nature, these non-conformities should be closed with documentary evidence or through an on-site visit within 28 calendar days of the audit. Once nonconformities have been addressed and the auditor has accepted the evidence, an independent technical review of the audit is conducted by an authorised Certification Manager who approves the issuance of a certificate.

 Step D – Full recertification audits are scheduled at defined intervals depending on the outcome of the certification audit. For Grade A and B audits this is 12 months later, for a Grade C audit this is 6 months later. The audit is a full re-audit conducted in the same way as the initial audit, but the implementation of the action plan is also reviewed, addressing past non-conformities and whether the audit has taken place by the re-audit due date.





Food Safety System Certification FSSC 22000

Owned by The Foundation for Food Safety Certification, the FSSC 22000 (also known as FS 22000) combines the ISO 22000 Food Safety Management Standard with the Publicly Available Specification (PAS) 220 (or ISO/ TS 22002-1) along with some other requirements. Alone the ISO 22000 was not sufficient to achieve GFSI approval due to the weaknesses in the Pre-Requisite Program (PRP) content. As a result a group of large multinational companies came together to write the PAS 220, which focuses on covering the necessary PRPs. However, the GFSI required that there was an overall industry owned scheme that brought the two individual programs together, with an emphasis on regulatory and customer requirements. So with this in mind. the FSSC 22000 was developed. This combination in the form of the FSSC 22000 created a standard that is fully recognised by the GFSI and serves as an international benchmark for food safety.

Designed for food manufacturers who supply their products to major food retailers, or plan to do so, any manufacturer already certified against the ISO 22000 only needs to be reviewed against the PAS 220 and the additional requirements to ensure they receive the GFSI approved certification. The FSSC 22000 can be applied to a wide range of food manufacturing organisations, irrelevant of their size or the complexity of their food management processes. This includes public and private companies, and those that manufacture perishable animal or vegetable products, products with a long shelf life, food ingredients and/or food additives.

The Requirements

The FSSC 22000 requires that each of the following are met:

- Food Safety Management System
 ISO 22000
- Pre-Requisite Programmes PAS 220 or ISO/TS 22002-1
- Additional requirements
 (3 additional requirements)
- Inventory of Applicable Regulations
- The food manufacturing organisation must have an inventory of:
 - Applicable foreign, regulatory and statutory requirements on food safety, including those applicable to raw materials/services provided, products manufactured and delivered
 - Applicable codes of practice related to food safety, customer requirements related to food safety and any other additional

requirements on food safety determined by the organisation

- The food safety system shall ensure and demonstrate conformity with these requirements
- Specification of services
- The food manufacturing organisation must ensure that all services (including utilities, transport and maintenance) which may have an impact on food safety have specified requirements, are described in documents to the extent needed to conduct hazard analysis and are managed in conformance with the requirements of BSI-PAS 220, clause 9
- Supervision of food safety personnel in relation to applicable food safety principles
- The organisation shall ensure the effective supervision of the personnel in the correct application of the food safety principles and practices commensurate with their activity

The Benefits

Most of the major benefits of the FSSC 22000 relate to its comprehensiveness as a food safety management system standard. This is because:

 It provides a good framework against which an organisation can develop its food safety management system, as it is not too descriptive and has the flexibility to allow the organisation to choose the best way to control its own system

- It includes comprehensive requirements detailing how the organisation can conduct an effective HACCP analysis or HACCP studies
- The standard promotes continuous improvement in food safety
- It targets its focus on food safety and legal compliance
- It easily integrates with an organisation's existing management system or other systems in place, i.e. quality management systems, environmental management systems etc.
- It allows small, less structured organisations to implement an externally developed system
- Many major brands have adopted this system and standard so it is beneficial for ingredients suppliers to be aligned with these customers

Further to this, another major benefit of the FSSC 22000 is its acceptance by the European Cooperation for Accreditation (EA). This accreditation, which was awarded in October 2010, means that most accreditation bodies will now accept FSSC 22000.

The Certification Process

The FSSC 22000 certification processes is identical to that for the ISO 22000 and consists of six steps:

- Step A A proposal from the certification body is provided based on the size and nature of an organisation. Once this is accepted the audit process can proceed.
- Step B There is then an optional 'pre-audit' stage, which is often useful in identifying any weaknesses in systems and in building confidence before the formal audit.
- Step C The first part of the formal audit is 'Stage 1 - Readiness Review'. This onsite audit evaluates the compliance of an organisation's documented system with the requirements of the standard. As part of this the audit ensures correctness and completeness of hazard identification, CCP determination and that prerequisite programs are in place and appropriate to the business. After this stage the rest of the audit can be effectively planned and key elements of the system can undergo an initial examination. A report then identifies any concerns or observed noncompliances so that immediate action can be taken as required.
- Step D This is 'Stage 2' of the initial audit process. The audit includes interviews with employees and examination of records. Observation of working practices determines how compliant actual processes are with the standard and with an organisation's own documentation system. At the end of this stage, the findings of the audit are presented along with other observations and opportunities for improvement. Once the non-conformities have been addressed, a technical review of the audit will then be conducted by an authorised Certification Manager to confirm the issuance of a certificate.
- Step E Surveillance visits are scheduled at either six or twelve month intervals. During the visits, the implementation of the action plan is reviewed, addressing the past non-conformities and examining certain mandatory and other selected parts of the system in line with a provided audit plan.
- Step F Shortly before the third anniversary of the initial certification, a routine visit is extended to enable a re-certification audit. Surveillance visits then continue, as before, on a three-year cycle.



FSSC 22000 & ISO 22000 CERTIFICATION PROCESSES

The International Features Standard (IFS)

Originally developed by an association of German retailers to serve as an alternative to the BRC standard, French retailers and more recently Italian retailers both play an important role in the specifics and operation of the IFS. In parallel, all major retailers across Germany, France, Italy and many other EU countries require their suppliers to comply with the IFS.

The IFS aims to provide a uniform quality assurance and food safety standard for retailer branded food products. Through a consistent evaluation system and uniform audit procedures the standard generates transparency throughout the supply chain, while ensuring regulatory requirements are met and that retailers and wholesalers are protected against liabilities.

The IFS provides a range of integrated checks on food safety and food quality in food processing companies. It covers all product ranges, offering certification across the whole range of food processing with the exception of agricultural primary production. The IFS covers the complete food supply chain with three related standards:

- IFS Food
- IFS Broker
- IFS Logistics

The Requirements

The audit assesses whether the elements of an organisation's quality management system are documented, implemented, maintained and continuously approved. The elements that are examined are as follows:

- Senior Management Responsibility
 - Corporate Policy/Corporate Principles
 - Corporate Structure & Processes
 - Customer Focus
 - Management Review

- Quality Management System
- HACCP
 - HACCP System
 - Assemble HACCP Team
 - HACCP Analysis
- Documentation Requirements
- Record Keeping
- Resource Management
 - Human Resource Management
 - Human Resources
 - Personal Hygiene
 - Protective Clothing for Personnel Contractors and Visitors
 - Procedures Applicable to Infectious Diseases
 - Training
 - Sanitary Facilities, Equipment for Personal Hygiene and Staff Facilities
- Production Process
 - Contract Review
- Product Specifications
- Product Development
- Purchasing
- Product Packaging
- Factory Environment Standards
- Housekeeping & Hygiene
- Waste & Waste Disposal
- Risk of Foreign Bodies, Metal, Broken Glass & Wood
- Pest Monitoring/Pest Control
- Receipt of Goods & Storage
- Transport
- Maintenance & Repair
- Equipment
- Process Validation
- Traceability (including GMOs and Allergens)
- Genetically Modified Organisms (GMOs)
- Allergens, Specific Methods of Production & Treatment

- Measurements Analysis
 & Improvements
 - Internal Audits
 - Site Factory Inspections
 - Process Control
 - Calibration & Checking of Qualified Measuring & Monitoring Devices
 - Quantity Checking (Quantity Control/Filling Quantities)
 - Product Analysis
 - Product Quarantine & Product Release
 - Management of Complaints from Authorities & Customers
 - Management of Incidents, Product Withdrawal, Product Recall
 - Management of Non-Conforming Products
 - Corrective Actions

The Benefits

There are a number of benefits to IFS certification, including:

- It has a simple certification process which only requires an onsite audit (there is no requirement for a desk study step)
- The standard has a focus on quality, food safety and legality
 - Once certified there is no need for a re-audit and certification for 1 year (this applies to all levels awarded)
- The IFS has a global network of strategically placed offices covering Europe, the Americas, and Asia supporting retailers, suppliers and certification bodies with operational, training and business development
- Suppliers are given a 12-month time period to make corrective actions (when not directly related to food safety or regulatory compliance) allowing for budget planning and continuous improvements

- Audits can be conducted electronically with software support, which also provides reporting with year-on-year results, certification audit importing/ analysis and global category specific benchmarking
- Safety and Quality certification are both covered in one audit saving money by reducing the potential for further audits
- All of the IFS criteria are risk-based and there are no prescriptive elements
- The IFS Audit Portal is both a database and a reporting and notification tool
- The IFS offers an Integrity Program providing Quality Assurance and a formal Complaint Management System for retailer confidence

The Certification Process

The IFS has two levels of certification:

- Foundation
- Higher Level

The certification process consists of four steps and excludes a desk study stage in advance of the onsite audit:

- Step A A proposal is provided based on the size and nature of an organisation. Once this is accepted the audit process can proceed.
- Step B There is then an optional 'pre-audit' stage, which is often useful in identifying any weaknesses in systems and in building confidence before the formal audit.
- Step C The formal audit is an onsite audit. All parts of the site and process covered in the scope are assessed to determine compliance with every clause of the standard. Organisations receive a Corrective Action Report at

the end of this audit, identifying any observed non-conformities. Within two weeks of this stage a pre-report is issued identifying any concerns or observed non-conformities. An organisation is given two weeks to respond to the non-conformities (4 weeks from audit date). These nonconformities need to be closed with documentary evidence or through an on-site visit. Once the nonconformities have been addressed and the auditor has accepted the evidence, an independent technical review of the audit is conducted by an authorised Certification Manager who approves the issuance of a certificate.

 Step D – The certificate is valid for one year so a full recertification audit is scheduled for twelve-months later. The audit is a full re-audit conducted in the same way as the initial audit, but the implementation of the action plan is also reviewed and past nonconformities are addressed.

IFS CERTIFICATION PROCESS



Safe Quality Food (SQF) 2000 Standard

The SQF 2000 standard is half of a two-part scheme covering food manufacturing and distribution as well as primary production, the latter under the SQF 1000 standard. Developed in Western Australia but now owned by the Food Marketing Institute (FMI) in the USA, the scheme aims to meet the needs of buyers and suppliers worldwide. The standard certifies that a supplier's food safety and quality management system complies with international and domestic food safety regulations. As the SQF standard incorporates the complete supply chain, suppliers can assure their customers that food has been produced, processed, prepared and handled to the highest possible standards at every step of the way.

Each SQF standard can be achieved at 3 different levels, level 2 being GFSI approved.

THE THREE SOF CERTIFICATE LEVELS

 All requirements of the SQF 2000 Code met SQF Certificate level 3 	t		Compliant with HACCP quality management systems
• SQF 2000 Plan ++ (HACCP Plan) • SQF Certificate Level 2		Compliant with HACCP food safety requirements	
 GMP/GHP ++ SQF Expert SQF Training SQF Certificate Level 1 	Compliant with systems based on GMP		

The Requirements

The SQF 2000 standard requires each of the following, where appropriate, to be achieved at the level detailed:

- SQF 2000 System Requirements
 - Commitment
 - Document Control and Records
 - Specification and Product Development
 - Attaining Food Safety
 - Verification
 - Product Identification, Trace, Withdrawal and Recall
 - Site Security
 - Identity Preserved Foods

- Food Safety Fundamentals: Building and Equipment Design and Construction
 - Site Requirements and Approval
 - Food Handling Area
 - Water and Ice Supply
 - Storage Facilities
 - Separation of Functions
 - Onsite Laboratories
 - Staff Amenities
 - First Aid Facilities
 - Waste Disposal
- Exterior
- Food Safety Fundamentals: Pre-Requisite Programs

The Benefits

Certifying an organisation's food management system against the SQF programme requirements brings the following benefits:

- Enhancement of the organisation's food safety management system
- Certification demonstrates commitment to producing and trading safe food
- An increase in consumer confidence of the products produced
- Brand equity is enhanced
- Certification prepares organisations for inspection by regulatory authorities and other stakeholders
- An improvement in new market and customer prospects
- Should SQF level 3 be attained organisations can use the SQF quality mark on their products

The Certification Process

The SQF certification process consists of seven steps:

- Step A A proposal is provided based on the size and nature of an organisation. Once this is accepted the audit process can proceed.
- Step B Once an organisation has accepted the proposal, registration must take place on the SQFI website (www.sqfi.com).
- Step C There is then an optional 'gap-analysis' stage assessing an organisation's readiness for the audit. This is often useful in identifying any weaknesses in systems and in building confidence before the formal audit.
- Step D The first part of the formal audit is the 'Stage 1 – Assessment Process: Document Review'. Here the compliance of an organisation's documented system is evaluated against the requirements of the

standard with the goal of achieving a better understanding of the nature of the organisation, planning the rest of the audit as effectively as possible and examining key elements of the system at a basic level. After this, organisations receive a report identifying any concerns or observed non-compliances so that immediate action can be taken as required. All major non-conformities need to be closed out prior to the Stage 2 audit.

 Step E – This is 'Stage 2 – Assessment Process: Certification Audit' of the initial audit process. The audit includes interviews with employees and examination of records. Observation of an organisation's working practices determines how compliant its actual processes are with the standard and with its documentation system. At the end of this stage, the findings of the audit along with other observations and opportunities for improvement are presented to the organisation. Once non-conformities have been addressed a technical review of the audit is conducted by an authorised Certification Manager to confirm the issuance of a certificate.

- Step F Surveillance visits, if required, are scheduled at six-month intervals depending on the outcome of the certification audit and the grade received. During the visits, we review the implementation of the action plan addressing the past non-conformities and examining certain mandatory and other selected parts of the system in line with an audit plan provided before each visit.
- Step G Recertification audits are scheduled at twelve-month intervals. The Recertification audit is undertaken to verify the continued effectiveness of an organisation's SQF System in its entirety.

SQF CERTIFICATION PROCESS



Best Aquaculture Practices (BAP) standards

The BAP Standards have been developed by the Global Aquaculture Alliance to address environmental and social responsibility, animal welfare, food safety and traceability in a voluntary certification program for aquaculture facilities. The Global Aquaculture Alliance is a non-profit NGO working to advance environmentally and socially responsible aquaculture and a safe supply of seafood. As part of this, BAP certification covers the most important elements of responsible aquaculture and provides quantitative guidelines so that compliance can be measured. The standards spread across every type of organisation in the seafood supply chain from hatchery and feed mill, to farm and processing plant. Although individual BAP standards vary by facility type, each addresses community and employee relations, conservation of biodiversity, soil and water management, and drug and chemical management.

Global Red Meat Standard

The Danish Agriculture & Food Council, in co-operation with the Danish Co-operative of Slaughterhouses and the Danish Meat Institute, developed the Global Red Meat Standard (GRMS). This scheme is specifically for the meat industry and aims to deliver EN45011 certified standards though an auditing programme. The standard covers all aspects of transport, lairage, stunning, slaughtering, deboning, cutting and handling of meat and meat products. The standard assesses: buildings; external areas; process layout and equipment; product handling; process management and production monitoring; dispatch and external storage; cleaning programmes; traceability; product recall procedures; non-conformance procedures; product specifications; measuring equipment; complaints procedures; HACCP system; internal audit; purchasing; sales; quality management systems; management responsibilities; personnel, visitors and external labour; and training.

Synergy 22000

The Synergy 22000 certification combines two complementary standards to provide a GFSI recognised food safety management system. The initial standard is the ISO 22000, which is a requirement for any organisation within the food supply chain, accompanied by either PRP 22000 or ISO TS 22002-1. Both these options cover PRP requirements for organisations in the food supply chain in relation to food safety management systems. As part of the Synergy 22000 scheme and in conjunction with these standards, the most appropriate PRPs need to be in place, as specified. The Synergy 22000 also sets out the operating procedures and protocol for the certification scheme. The ISO 22000 and PRP 22000 combination is applicable to the entire food chain and related activities, while the combination of ISO 22000 & ISO TS 22002-1 is only applicable to the food processing or manufacturing step of the food chain.

PRIMARY PRODUCTION SCHEMES

CanadaGAP

The CanadaGAP (Good Agricultural Practices) standard is owned by the Canadian Horticultural Council and is essentially an On-Farm Food Safety (OFFS) Program. It combines national food safety standards with a certification system for the safe production, storage and packing of fresh fruits and vegetables.

The program is aimed at producers, packers and storage intermediaries of horticultural crops and has been designed to help them implement food safety procedures into their operations. It is crop specific, laying out six differing sets of Good Agricultural Practices (GAP) that have been developed by the horticultural industry and technically verified by Canadian government officials. Each set of practices is based on the seven basic principles of HACCP and is recognised by the GFSI.

By achieving certification a primary producer can prove to their customers that they have the systems and procedures in place to minimise the risk of contamination to the product produced. As part of this the auditor gains evidence that an ongoing, maintained food safety system is present within an organisation's operations.

GlobalG.A.P

GlobalG.A.P. promotes Good Agricultural Practices (GAPs) and as such is committed to supporting food safety and sustainability in the agricultural, livestock and aquaculture supply chains. Compliance with GlobalG.A.P. standards ensures that food products are safe and farmed or raised in a sustainable manner. This means the environmental impacts of farming operations are minimised, chemical inputs are reduced and that through every aspect of the production process worker health and safety and animal welfare have been considered.

The GlobalG.A.P. standard brings together the needs of agricultural producers and retailers. It covers all aspects of the production process up to the farm gate. This includes feed, seeds and all the farming activities up to the point the product leave the site. It has become a key point of reference for GAPs. Fresh fruit and vegetables, propagation material, integrated farm assurance (livestock, dairy, pigs, poultry, combinable crops and grains, tea, coffee and aquaculture) and flowers and ornamentals are all covered by the standard.

Members of GlobalG.A.P. are made up of farmers, ranchers, product marketing organisations, grower's co-operatives, food manufacturers and retailers. The standard and the certification is approved by the Technical and Standards Committees for each product sector: crops; livestock; and aquaculture. These committees are supported by FoodPLUS, which is the GlobalG.A.P. secretariat based in Germany.

The Requirements

The standards are separated into four different categories:

- The GlobalG.A.P. Integrated Farm Assurance Standard (IFA)
- The GlobalG.A.P. Compound Feed Manufacturer Standard (CFM)
- The GlobalG.A.P. Plant Propagation Material Standard (PPM)
- The GlobalG.A.P. Risk Assessment on Social Practice (GRASP)

Within each, the requirements are organised into six sections, each of which has its own set of required elements. Organisations being assessed against the standard combine the applicable elements from each of the six sections to make a package relevant to their business. The six sections are as follows:

- System rules referred to as General Regulations (GR)
- GlobalG.A.P. requirements referred to as Control Points and Compliance Criteria (CPCC)
- Inspection documents referred to as Checklists (CL)
- National GAP requirements referred to as Approved National Interpretation Guidelines

- Guidelines and Supporting documents
- Harmonisation tools referred to as Benchmarking Cross Reference Checklist (BMCL), where applicable

All farm base module

- Site History and Site Management
- Record Keeping and Internal Self-Assessment/Internal Inspection
- Workers Health, Safety and Welfare
- Subcontractors
- Waste and Pollution Management, Recycling and Re-Use
- Environment and Conservation
- Complaints
- Recall/Withdrawal Procedure
- Food Defence (not applicable for flowers and ornamentals)
- GlobalG.A.P. Status
- Logo Use
- Traceability and Segregation (obligatory when producer is registered for parallel/production/ parallel ownership)

Crops Base Module

- Traceability
- Propagation Material
- Site History and Site Management
- Soil Management
- Fertiliser Application
- Irrigation/Fertigation
- Integrated Pest Management
- Plant Protection Products
- Equipment

Applies to: fruit and vegetables; combinable crops; green coffee; and tea.

Livestock Base

- Site
- Worker Health, Safety and Welfare
- Livestock Sourcing, Identification and Traceability

- Livestock Feed and Water
- Livestock Housing and Facilities
- Livestock Health
- Medicines
- Fallen Stock Disposal
- Livestock Dispatch

Applies to: ruminant base (cattle and sheep); dairy; calf/young beef; pig; poultry; and turkey.

Aquaculture Module

- Site Management
- Reproduction
- Chemicals
- Occupational Health and Safety
- Fish Welfare, Management and Husbandry
- Harvesting
- Sampling and Testing
- Feed Management
- Pest Control
- Environmental and Biodiversity Management
- Water Usage and Disposal
- Post Harvest Mass Balance and Traceability
- Post Harvest Operations
- Social Criteria

The Benefits

Certifying On-Farm Management Systems against the GlobalG.A.P. requirements provides an organisation with the following benefits:

- Enhanced On-Farm Food Safety Management Systems
- Demonstrates Commitment to Producing or Trading Safe Food
- Leads to Acceptance into the GlobalG.A.P. Community
- Increases Consumer and Customer Confidence in Product Safety and Quality

The Certification Process

The GlobalG.A.P certification process consists of five steps:

- Step A A proposal is provided based on the size and nature of an organisation. Once this is accepted the audit process can proceed.
- Step B There is then an optional 'gap-analysis' stage assessing an organisation's readiness for the audit. This is often useful in identifying any weaknesses in systems and in building confidence before the formal audit.
- Step C The first part of the formal audit is the 'Stage 1 - Assessment Process: Document Review' (option 2 only). Here the compliance of an organisation's documented system is evaluated against the requirements of the standard with the goal of achieving a better understanding of the nature of the organisation, planning the rest of the audit as effectively as possible and examining key elements of the system at a basic level. After this, organisations receive a report identifying any concerns or observed non-compliances so that immediate action can be taken as required. All major non-conformities need to be closed out prior to the Stage 2 audit.
- Step D This is 'Stage 2 Assessment Process: Certification Audit' of the initial audit process. The audit includes interviews with employees and examination of records. Observation of an organisation's working practices determines how compliant its actual processes are with the standard and with its documentation system. At the end of this stage, the findings of the audit along with other observations and opportunities for improvement are presented to the organisation. Once non-conformities have been addressed a technical review of the audit is conducted by an authorised Certification Manager to confirm the issuance of a certificate.

- Step E– Unannounced surveillance visits are scheduled between certifications. During the visits, the implementation of standard maintenance is reviewed.
- Step F– Full recertification audits are scheduled at twelve-month intervals. At the same time, implementation of the action plan to address the past non-conformities is reviewed. Certain

mandatory and other selected parts of the system are also examined to ensure they are in line with an audit plan provided before each visit.





Option 2 (Group Certification): Mandatory

Safe Quality Food (SQF) 1000 Level 2

The SQF 1000 is much the same as the SQF 2000, except that it is designed for primary producers such as growers and farms rather than manufacturers. As with the SQF 2000, which is discussed under the section on Manufacturing Schemes, the SQF 1000 standard is made up of three levels, of which level 2 is GFSI approved. The SQF 1000 system consists of the SQF code and its corresponding guidance documents. It is a HACCP-based supplier assurance code designed to meet the food safety and quality system requirements applied by a primary producer.

The scope and related requirements of the SQF 1000 are much the same as for the SQF 2000 described previously, with the exception of one section. The SQF 2000 has a section titled: 'Requirements for Food Contained in Hermetically Sealed Rigid, Flexible or Semi Rigid Containers', which is not part of the SQF 1000. Instead the SQF 1000 has a section covering Global G.A.P. specifically laying out requirements in relation to: genetically modified organisms; fertilisers; crop protection and; workers health, safety and welfare. The requirements are outlined below:

- SQF 1000 System Requirements
 - Commitment
 - Document Control & Records
 - Specifications
 - Attaining Food Safety
 - Verification
 - Product Identification Trace & Recall
 - Site Security
- Food Safety Fundamentals Site Requirements, Facilities and Production Inputs
- Food Safety Fundamentals Pre-Requisite Programs (Good Agriculture Practice)
- Global G.A.P.
 - Genetically Modified Organisms
 - Fertiliser
 - Crop Protection
 - Workers' Health, Safety & Welfare
 - Environmental
- Implementing SQF 1000 Systems
- Principles and Application of HACCP
 - Certifying SQF 1000 Systems
- SQFI Audit & Certification Management System and Supplier Database
- SQF 1000 Certification Trademark Rules for Use
- Multi-site Certification

As with the SQF 2000, the certification process covers a combination of both desk research and an on-site audit procedure. All non-compliance findings from the document review stage again need to be addressed before the onsite audit can begin. The certification issued lasts one year with a six-month surveillance audit for any organisations only achieving a grade C award. For the full details of the certification process see the SQF 2000 section.

PRIMARY AND MANUFACTURING SCHEMES

PrimusGFS

The PrimusGFS standard focuses on the food safety of agricultural products designated for human consumption in their fresh or in a minimally processed way. PrimusGFS establishes a series of requirements for managing the production, handling, processing and storing operations, which should be met for consumer safety.

The PrimusGFS scheme covers the full supply chain, from pre- to post-farm gate production, with an integrated supply chain approach. It is a voluntary worldwide certification scheme certifying agricultural sector products. It sets minimum acceptable levels in relation to each of the requirements it includes.

IV. A COMPARISON OF THE GFSI RECOGNISED SCHEMES

Each scheme has a number of similarities as to be GFSI approved the GFSI requirements have to be met. Although exact details can vary from scheme-to-scheme, and there may also be a number of other elements built in to make a scheme specific fit a certain purpose or industry sector, the most all-encompassing schemes are the FSSC 22000 standard, the BRC standard, the SQF 2000 standard and the IFS. These are compared in more detail below.

STRUCTURAL OVERVIEW OF FSSC 22000, BRC, SQF 2000 AND IFS STANDARDS

How the GFSI requirements are covered in the key global food safety standards:

GFSI REQUIREMENTS	FSSC 22000	BRC	SQF	IFS
FOOD SAFETY MANAGEMENT SYSTEM	Food Safety Management System (FSMS)	Food Safety and Quality Management System	Food Safety and Quality Management System	Quality Management System
	Management Responsibility	Senior Management Commitment and Continual Improvement	Commitment	Senior Management Responsibility
	Management of Resources	Personnel	Training of Personnel	Resource Management
	Planning and Realisation of Safe Products	Food Safety and Quality Management System, Product Control	Specification and Product Development	Production Process
	Validation, Verification and Improvement of the FSMS	Internal Audit, Corrective and Preventive Action, and Calibration	Verification, Corrective and Preventive Action, and Calibration of Equipment	Measurement, Analysis and Improvement
GOOD MANUFACTURING Practices, good Distribution practices, good Agricultural practices	Planning and Realisation of Safe Products and PAS220	Site Standard, Product Control, Process Control, Personnel	Site Security, Identify Preserved Food, Product ID, Trace and Withdraw, and Food Safety Fundamentals	Human Resources, Food Hygiene Requirements (clauses 4.6-4.18)
HAZARD ANALYSIS AND CRITICAL CONTROL POINT (HACCP)	Planning and Realisation of Safe Products, Validation, Verification and Improvement of the FSMS	Food Safety Plan – HACCP	Specification and Product Development, Attaining Food Safety	НАССР

A SECTION-BY-SECTION COMPARISON OF THE KEY SCHEMES

General Requirements

The general requirements for all schemes are similar in that they require a competently implemented, regularly evaluated, continually improved, HACCPbased food safety management system.

Food Safety Policy

All schemes require a food safety policy that covers the scope of business activities. This policy should involve the implementation of a HACCP-based food safety system that complies with regulatory/customer reguirements, is internally audited, continually improved and effectively communicated to company personnel. This policy must be supported within the organisation and measurable objectives need to be set and tracked. The IFS scheme specifically requires the inclusion of environmental and social responsibility, while the BRC scheme requires that an organisation's policy include a provision to ensure that food safety system certification does not expire and that the organisation has purchased a copy of the current issue of the BRC Global Standard for Food Safety.

Food Safety Manual

All schemes require a food safety manual or a documented system to be in place that covers or references procedures that control significant food safety hazards. None of the schemes are specific about the title or format of such documentation, just that it exists.

Management Commitment/ Responsibility

All schemes require an organisational chart and job descriptions to be in place. They all place great emphasis on management commitment to implement and maintain an effective. continually upgraded food safety system demonstrated through regularly scheduled management review meetings, business continuity planning, establishment of effective channels for internal/external communication and the appointment of a food safety team and leader. For BRC there is no specific leader required but the responsibilities for management of activities that ensure food safety, legality and quality shall be clearly allocated. The team leader/ management must be responsible for developing, implementing and communicating the elements of the food safety management system to company personnel and must have the authority to act on management's behalf on food safety issues. The SQF scheme calls the team leader the 'SQF Practitioner' and specifically requires that this individual be a full-time employee of the company, be trained in HACCP principles and is able to demonstrate a working knowledge of the applicable SQF code requirements. The SQF scheme also requires that the organisational structure within the company be communicated to all staff. The BRC scheme specifically requires the most senior production or operations manager onsite must attend the opening and closing meetings of the certification audit for the Global Standard for Food Safety. Also required is that the relevant Departmental managers are available throughout the audit process and senior management must also ensure all non-conformities that were identified at the previous audit against the standard are effectively actioned.

Management review

All schemes require senior management to review at pre-arranged intervals the verification of the food safety management system and HACCP plan to ensure its continuing suitability, adequacy and effectiveness. Review of the food safety system is also required in the event of any change that could affect food safety. More specifically, the IFS scheme requires that the management review includes: buildings; supply systems; equipment and transport; staff facilities; environmental conditions; safety and security at work; hygienic condition; and workplace design and external influences (e.g. noise, vibration). The IFS also requires that the result of the review is included in subsequent budgeting. The BRC scheme requires that the review process includes: previous management review documents; action plans/time frames; customer complaints; results of any customer performance reviews; incidents; corrective actions; out-ofspecification results; non-conforming material; review of the management of the HACCP system; and resource requirements. The SQF scheme requires the review to include: policies; internal and external audit findings; corrective action; and customer complaints. Records of amended documents, validation and changes to the SQF system also need to be maintained.

Resource management

All schemes require that senior management provide adequate resources to ensure that the food safety management system continues to be effective in meeting regulatory and customer requirements, including responsibility for competent provision of outsourced services or activities.

Documentation

All schemes require documented procedures to demonstrate conformance with the specified scheme requirements and records to demonstrate the effective control of processes and food safety management. Customer and supplier related specifications related to food safety must also be controlled. Requirements include verified issuance and consistent versions, as well as secure storage of such documents in a manner that allows them to be accessible for a retention time that meets customer and legal requirements. BRC requires that electronic records be backed up and both the BRC and SQF schemes require that documents are in a language or languages spoken by the organisation's staff and that they are sufficiently detailed.

Specifications

All schemes require documented specifications for all items and services (including utilities, transport and maintenance) purchased or provided which have an effect on product safety and that a regular review process is in place to ensure these specifications are kept up to date.

Internal Audit

All schemes require the organisation to have an internal audit system in place that covers all systems and procedures critical to product safety and all applicable elements of the scheme. This internal audit must be performed annually at least once a year, by trained personnel independent of activities audited, with documented results and prompt follow-up to correct any identified non-conformities. The IFS scheme states examples of verification activities, including analysis, sampling, and evaluation. The BRC scheme states that examples of verification activities include a review of records where acceptable limits have been exceeded, review of incidents of product withdrawal or recall. BRC also requires documented inspections of the factory environment and processing equipment. The SQF scheme requires that an internal audit schedule is in place, describing the verification activities, their frequency of completion and the person responsible for each activity.

Corrective action

All schemes require that the organisation has documented, securely stored, accessible procedures in place for the determination and implementation of timely, verified corrective action in the event of any nonconformity relating to product safety. The corrective action must include actions to bring the process back under control and to prevent recurrence of the non-conformity and should identify and address the root cause of the issue.

Control of non-conforming product

All schemes require that the

organisation has documented, securely stored, accessible procedures in place to ensure that any product that does not conform to food safety requirements is clearly identified and controlled to prevent unintended use or delivery.

Product release

All schemes require that the organisation has appropriate procedures in place to ensure that food safety requirements are adequately met prior to product release.

Purchasing, supplier approval/monitoring

All schemes require that the organisation controls purchasing processes to ensure that all externally sourced items conform to food safety requirements and that procedures are in place for approval and continued monitoring of its suppliers. The results of supplier evaluations and follow up actions must be recorded. The BRC scheme includes additional requirements for risk assessment of raw materials to identify potential risks. The assessment forms the basis for raw material acceptance and testing procedure and the processes used for supplier approval and monitoring. In addition, specific control (including a site audit) is required where an intermediate process step is sub-contracted to a third party or other company site.

Traceability

All schemes require procedures to be in place to identify all lots of raw materials and packaging from receipt through in-process status to finished product and at a minimum to the next level of distribution. Traceability requires testing annually with results documented and used to improve the process when results do not fall within acceptable tolerance levels. The BRC requires that mass balance can be demonstrated and that traceability is achievable within 4 hours.

Complaint handling

All schemes require that the organisation implements an effective system for the management of complaints related to food safety, including action to prevent recurrence of the problem and identification of root cause.

Incident management/ business continuity

All schemes require that the organisation has an effective incident management procedure in place that is tested at least annually and covers contingency planning for business continuity as well as plans for product withdrawal and product recall if warranted by investigation.

Calibration

All schemes require that the organisation identifies measuring and monitoring devices required to assure product safety and has methods in place to ensure these devices are calibrated against a recognised standard.

Product testing and analysis

All schemes require that the organisation implements a system to ensure that finished product/ingredient analyses critical to the confirmation of conformity to critical food safety parameters is performed to standards equivalent to ISO 17025 and that this analysis is done frequently enough to optimise food safety.

Good manufacturing practises (GMPs) & Pre-requisite programs (PRPs)

All schemes require the organisation to have effective PRPs in place, with regularly scheduled monitoring, documented corrective actions in response to non-conformities and verification of activities key to food safety control. PRPs include control of: facility exterior/interior (materials & structural integrity); layout/product/ utility/personnel flow; staff facilities; equipment design/maintenance; risk of biological/chemical/physical contamination (including allergen control); storage and transport (including temperature control in storage and transport); stock rotation; sanitation/ cleaning; pest management; water quality; waste handling; personnel hygiene/training/evaluation; labelling; facility security; food defence; traceability and recall procedures. The schemes detail specific requirements for each group of pre-requisites that need to be complied with. All schemes also have requirements for enhanced hygiene, apparel and personnel flow control in high-risk areas. Some schemes have very specific requirements for such areas that can be individually researched (e.g. the BRC requirement for physical separation and apparel control) but most PRP requirements are common to all food processor schemes approved by the GFSI.

HACCP

A competent HACCP process for food safety control is a mandatory requirement for all GFSI food processor approved schemes. The HACCP should be based on the Codex Alimentarius principles. This process includes five preliminary steps to HACCP:

- Establishment of a Multi-Departmental Food Safety/HACCP Team
- Descriptions of Key Food Safety Characteristics of Finished Products
- Characteristics of Raw Materials (including sources)
- Creation/Verification of Process Flow Diagrams (including water treatment/ utility in feeds and waste/rework flow)
- Creation/Verification of
 Plant Schematics

The HACCP principles are also mandated by all schemes. These cover:

- Research and Identification of Food Safety Hazards Associated with Ingredients
- Process Aids/Non-Food chemicals
- Equipment
- Packaging and Process Steps (including supplier level, controllable customer level and transport generated hazards)
- Identification of Control Measures for Each Hazard
- Establishment of Critical Control Points (CCPs) and/or Operational Pre-Requisite Programs (PRPs are the intermediate level of control between general PRP controls and very strict CCPs)

For each CCP a HACCP plan is required. The HACCP plan must include the critical limits for each control measure; responsibility and the frequency of monitoring these limits; deviation procedures/corrective actions to be taken whenever critical limit non-conformity occurs; and responsibility and frequency of significant task verification; and records associated with each CCP (including corrective action records). Each scheme phrases these requirements in their own terms but the essential requirements are common to all.



Validation, verification and continual improvement

All schemes require that the organisation provides evidence that they have validated the assumptions and effectiveness of controls within the food safety management system. They also require that the organisation plans verification activities, both routine (e.g. next day record review) and complete system verification (including sampling of records for each significant food safety task, procedure/HACCP plan review, key personnel interviews/evaluation and on site verification of operations). Verification planning must establish measures/schedules to maintain the effectiveness of the food safety management system and must include all aspects of the applicable scheme, including management review, supplier related activities, PRPs, preliminary steps, HACCP activities/studies and continual improvement. The results of verification must be analysed for trends and submitted to management review and must be used to continually improve the food safety management system. Revalidation is required in the event of any changes that could impact food safety. Management must ensure that measures/personnel are in place to regularly research changes to information, regulations and customer requirements and they are brought to the attention of management in order to upgrade the food safety management system and maintain its effectiveness. While the BRC and FSSC 22000 schemes provide more specific details on validation/verification requirements, all schemes imply or include the elements discussed in this section. What an organisation should consider when choosing a scheme

The most important thing an organisation needs to consider when choosing a GFSI approved food safety scheme is making sure there is the perfect match between the scheme and the organisation. While each scheme meets the requirements of the GFSI, they do it through an individual approach. At the heart of the decision as to which scheme is best for a particular organisation is having a clear understanding of the customer and regulatory requirements that affect the organisation's business and therefore need to be covered by the chosen audit. This is a research task for the organisation and once fully understood, even ahead of choosing the audit, the organisation should develop and put in place its own food safety system. Once the organisation is confident that its system is sufficiently robust and that it can stand up to validation and auditing, the appropriate audit can be chosen to match.

COMPARING THE STANDARDS

SUBJECT	BRC	IFC	SQF	FSSC 22000
SYSTEM REQUIREMENTS	Quality and food safety	Quality and food safety	Level 2 Food Safety Level 3 Include Quality (need to conduct food safety analysis, define critical quality control point)	Food Safety
SYSTEM ESTABLISHMENT AND IMPLEMENTATION	Prescriptive requirements	Prescriptive requirements	Some requirements are prescriptive Require SQF practitioner (full timer)	Provide frame work requirements for the company to demonstrate how to comply and demonstrate their food safety system
REPORT/DATA MANAGEMENT	By Certification body and Standard owner	By Certification body and Standard owner	Company needs to register in Quick fire prior to certification process	By Certification body and Standard owner
CERTIFICATION PROCESS	No stage 1 - Company can easily go direct to on site certification audit	No stage 1 - Company can easily go direct to on site certification audit	Stage 1 on site or off site Stage 2 on site	Stage 1 on site Stage 2 on site
			Any Major non conformity found during Stage 1 need to be closed out prior to stage 2 audit	Critical from stage 1 to be closed out during Stage 2 audit

SUBJECT	BRC	IFC	SQF	FSSC 22000
CERTIFICATE VALIDITY	Certificate valid for 1 year Grade C-Recertification within 6 months	Certificate valid for 1 year	Certificate valid for 1 year Grade C-Recertification within 6 months	Certificate valid for 3 years
INTEGRATED AUDIT	As recertification is depending on the result of the audit (grade C need to be 6 months so interval or integrated condition will be changed depending	Not allow integrated with ISO management system standard, allow integrated with product certification scheme	Different management system structure but possible for integrated audit	Same management system structure as ISO standard so it is easily to integrate with other management system standards
RECERTIFICATION/ MAINTENANCE VISIT	Same audit time as Certification visit	Same audit time as Certification visit	Same audit time as Stage 2 on site	Less audit time than Stage 2 on site
CERTIFICATION MARK	Not allow to be displayed on the product	Not allow to be displayed on the product	Level 3 certification can use certification mark on the product	Not allow to be displayed on the product

The regulations and the internal food safety system can be cross-referenced against each of the GFSI recognised schemes. By doing this, the organisation can view the areas of 'fit' with each scheme available. Fundamental to choosing the right scheme is ensuring that the audit information that can be extracted from the organisation's operations is extensive, exhaustive and reliable. Only by providing accurate information to an auditing body is it possible to get true value from an auditing procedure.

It is unlikely that when an organisation cross-references its requirements with each of the schemes that there will be one scheme that has the overall best fit. Instead, it may be that one scheme is best for one element while another is best for other elements. For organisations where this is the case, it is possible to audit against a combination of integrated audits to ensure that the appropriate parts of each are covered while gaining certification against each of them. This is known as a Customised Single Audit solution.



V. COMBINING GFSI RECOGNISED SCHEMES WITH THOSE RELATED TO THE ENVIRONMENT, HEALTH & SAFETY AND QUALITY

Achieving a GFSI approved food safety certification is just one of the many certifications that an organisation operating in the food industry needs be able to prove it holds. In addition to the many different international standards in the area of food safety and quality management, there are also certifications for environmental and health & safety systems that are required. Further to this, organisations often need audits relating to the specific requirements of their operations. To manage each of the required audits and certifications individually can be a time consuming and costly process. Added to this, the audits frequently cover similar areas, so an individual area of an organisation's operations may find that it is constantly embarking on periods of auditing if each audit is performed separately.

A Customised Single Food Audit can combine both the GFSI recognised audits that are most appropriate with the environmental and health & safety audits the organisation requires. This eliminates the issue of more than one audit system being required to cover an organisation's operations. For example, at the same time as an organisation is audited for the GFSI approved FSSC 22000 it can also be audited against ISO 9001, ISO 14001 and OHSAS 18001. The table below demonstrates how the management system requirements for the FSSC 22000 GFSI approved certification scheme also appear within clauses of these other industry standard certification schemes:

MANAGEMENT SYSTEM REQUIREMENT SIMILARITIES ACROSS A NUMBER OF REQUIRED CERTIFICATION SCHEMES

MANAGEMENT SYSTEM REQUIREMENTS	FSSC 22000	ISO 9001	ISO 14001	OHSAS 18001
General Management System	Clause 4	Clause 4	Clauses 4.1, 4.4.4, 4.4.5 and 4.5.4	Clauses 4.1, 4.4.4, 4.4.5 and 4.5.4
Management Responsibility	Clause 5	Clause 5	Clauses 4.1, 4.2, 4.3, 4.4.1, 4.4.3 and 4.6	Clauses 4.1, 4.2, 4.3, 4.4.1, 4.4.3 and 4.6
Management of Resources	Clause 6	Clause 6	Clauses 4.4.1 and 4.4.2	Clauses 4.4.1 and 4.4.2
Product Realisation and Operational Control	Clause 7	Clause 7	Clauses 4.3.1, 4.3.2, 4.4, 4.4.3 and 4.4.6	Clauses 4.3.1, 4.3.2, 4.4, 4.4.3 and 4.4.6
Measurement, Analysis and Improvement	Clause 8	Clause 8	Clause 4.5	Clause 4.5

VI. CONCLUSION

Certifying an organisation against the requirements of a GFSI approved scheme means it is prepared to meet the growing global customer requirements and demonstrate its diligent focus on food safety system management. All GFSI schemes demand senior management commitment and require companies to regularly review customer requirements, define processes and demonstrate consistent control over identified hazards, updating and improving the food safety management system to adapt to changes in process, requirements or regulations. An organisation can choose to build a food safety system which conforms to a single scheme or more effectively it can build a robust system based on the most stringent requirements of several major schemes. This allows greater flexibility in meeting customer requirements or defending a system against challenges. The most important thing an organisation needs to consider when choosing a GFSI approved food safety scheme is making sure there is the perfect match between the scheme and the organisation. Regardless of which GFSI approved scheme is chosen, the organisation will benefit from the improved understanding of its processes and will be better positioned to consistently meet the need for sustainable food safety management.

ABOUT THE AUTHORS

Supreeya Sansawat Global Food Business Manager, SGS

Supreeya Sansawat has over 17 years of experience in quality assurance in the food industry including auditing and training. Supreeya has auditing experience in many food safety schemes, including GMP, Dutch HACCP, SQF, ISO 22000, ISO 9001, BRC and GlobalG.A.P. and has performed over 1 000 audits. She is now responsible for all of the technical development for SGS' food safety solutions, including maintaining and improving food safety auditor and trainer competencies for all GFSI recognised schemes as well as other standards related to the food industry.

Victor Muliyil

Technical Manager for North America Food Safety Services, SGS

Victor Muliyil is a certified multi-sector food safety programme lead auditor and trainer for BRC, SQF 1000/2000, GMP/ HACCP, ISO 22000 and ISO 9001. Victor is also responsible for the development and upgrading of food safety training courses, food safety and quality audit procedures and risk management programmes for several North American clients. He has over 22 years of experience in analytical laboratory management, quality assurance, food safety system development, implementation and auditing and holds degrees in Biochemistry, Microbiology and Food Science from the University of Toronto.

ABOUT SGS

SGS is the world's leading inspection, verification, testing and certification company. Recognised as the global benchmark for quality and integrity, we employ over 67 000 people and operate a network of more than 1 250 offices and laboratories around the world. We are constantly looking beyond customers' and society's expectations in order to deliver market leading services wherever they are needed.

SGS helps enhance food safety and quality with a comprehensive and cost-effective set of control solutions including audits, testing, inspection, technical solutions and training. These services can be stand alone or part of an integrated package of measures to assist your company in continuously improving the culture of food safety, quality and sustainable development.

Partnering with SGS opens the door to better performing processes, increasingly skilful talent, consistent and compliant supply chains and more sustainable customer relationships delivering profitable competitive advantage. Work with the global leader and take your commitment to the next level in food safety management systems.

We have a history of undertaking and successfully executing large-scale, complex international projects. With a presence in every single region around the globe, our people speak the language and understand the culture of the local market and operate globally in a consistent, reliable and effective manner. SGS is a leading independent body helping organisations improve their performance related to sustainable development.

FOR MORE INFORMATION, VISIT WWW.SGS.COM/FOODSAFETY OR EMAIL FOODSAFETY@SGS.COM

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