



**International Organization
for Standardization**

www.iso.org



Overview of the ISO 22000 Family of Standards

Kevin McKinley, Deputy-Secretary-General,
ISO Central Secretariat

Albert Chambers, ISO/TC 34 Working Group Expert and Vice-Chair,
Canadian Advisory Committee, ISO/TC 34

**Joint UNCTAD/WTO Informal Information
Session on Private Standards
25 June 2007, Geneva**

ISO SG/KMK/CI/2r/14518141 2007-06-25 The ISO 22000 Family of Standards – An Overview 2

Increased demand for voluntary international standards

- Globalization of trade in products and services
- Outsourcing and foreign investment
- Deregulation/privatization of public services
- The climate change challenge and energy efficiency mandates
- Public demand for consumer safety, environmental protection, corporate social responsibility
- Need for international solidarity to face global terrorism, pandemics and natural disasters
- Pace of innovation and convergence of new technologies

ISO SG/KMK/CI/2r/14518141 2007-06-25 The ISO 22000 Family of Standards – An Overview 3

ISO and the international scene

- World Trade Organization: observer status and collaboration
- UN and UN agencies including: CODEX, ILO (labour), IMO (maritime), ITC (Intl Trade Centre), UPU (postal), UN/ECE (Commission for Europe), UNIDO (development), WHO (health), WMO (meteorology), WTO (tourism) ...
- Other intergovernmental groups including OECD, medical device regulators (GHTF) ...
- 600 liaisons with international organizations in technical work
- Links with seven regional standardization-related bodies
- Economic actors: Accreditation (IAF), Lab accreditation (ILAC), Consumers International, International Chamber of Commerce, World Economic Forum, etc...

ISO SG/KMK/CI/2r/14518141 2007-06-25 The ISO 22000 Family of Standards – An Overview 4

World Trade Report 2005

Section II

Trade, Standards and the WTO

- Economics of standards and trade
- Institutions and policy issues
- Standards in the multi-lateral trading system



ISO SG/KMK/CI/2r/14518141 2007-06-25 The ISO 22000 Family of Standards – An Overview 5

The ISO system

At June 2007

156 national members

Consensus at two levels:
- Amongst global experts
- Amongst countries through ISO members

Catalogue of more than 16 000 published standards

685 active Committees
3 000 technical bodies
50 000 experts

IT tools
Standards development procedures
Consensus building
Dissemination

Central Secretariat in Geneva
150 staff

ISO SG/KMK/CI/2r/14518141 2007-06-25 The ISO 22000 Family of Standards – An Overview 6

Implementation of the ISO Action Plan



ISO Action Plan for developing countries 2005-2010



Key objectives:

- Improving awareness
- Developing capacity
- Increasing regional cooperation
- Developing electronic communications
- Increasing participation

Disseminating ISO 22000 standards

ISO 22000 regional seminars held in:

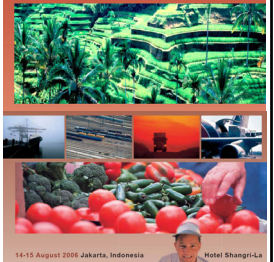
- Cairo, Egypt (ARSO)
- Windhoek, Namibia (SADC)
- Ouagadougou, Burkina Faso (UEMOA)
- Dubai, UAE (GSO)
- New Delhi, India (SAARC)
- Jakarta, Indonesia (ACCSSQ)
- Astana, Kazakhstan, Central Asia

ISO 22000 national seminars held in:

- Kenya, Tanzania, Uganda (following TOT seminars)
- Croatia, Libya, Mozambique and Yemen

Training delivered in:
English, French, Spanish, Russian and Arabic

ISO Regional Seminar on Food Safety Management Systems and ISO 22000



14-15 August 2006 Jakarta, Indonesia Hotel Shangri-La

ISO/TC 34, Food products

- Working Groups on: *Food Safety Management Systems, GMOs, Traceability systems, Food irradiation*
- Subcommittees (mostly test methods) on: *Seeds; Fruits and vegetables; Cereals; Milk; Meat and poultry; Spices; Tea; Microbiology; Animal feeding stuffs; Fats and oils; Sensory analysis; Coffee*
- 711 published standards, 55 participating countries, 49 observer countries
- Active liaisons with Codex Alimentarius Commission

ISO 22000 Family of Standards

- New Family – initiated in 2001
- Four Standards so far:
 - ISO 22000:2005 – *Food safety management system – Requirements*
 - ISO 22003:2007 - *Requirements for bodies providing audit and certification of food safety management systems*
 - ISO TS 22004:2005 - *Guidance on the application of ISO 22000*
 - ISO 22005 – *Traceability in the feed and food chain (to be published in July 2007)*

What food businesses were looking for ?

- Better planning, less post-process verification
- More efficient & dynamic hazard control
- Systematic management of prerequisite programs
- Better documentation
- Communication among trade partners
- Resource optimization (internally & along food chains)

Potential of ISO 22000

Seeking international coherence among many GMPs



ISO 22000 - Outline

- Section 1 – Scope
- Section 2 – Normative Reference
- Section 3 – Terms & Definitions
- Section 4 – Food Safety Management System
- Section 5 – Management Responsibility
- Section 6 – Resource Management
- Section 7 – Planning & Realization of Safe Products
- Section 8 – Verification, Validation & Improvement

Scope: what is ISO 22000:2005 ?

- A management system standard (based on ISO 9001:2000)
- Specific to food safety management (not quality, etc)
- Based on Codex HACCP approach with some innovations
- Designed for **all** segments of food chain & **all** types of food business (micro to global)
- Enables a food business to plan, implement, operate, maintain and **update** a system to provide safe end products and demonstrate conformity with applicable regulatory requirements

Section 5 – Management Responsibility

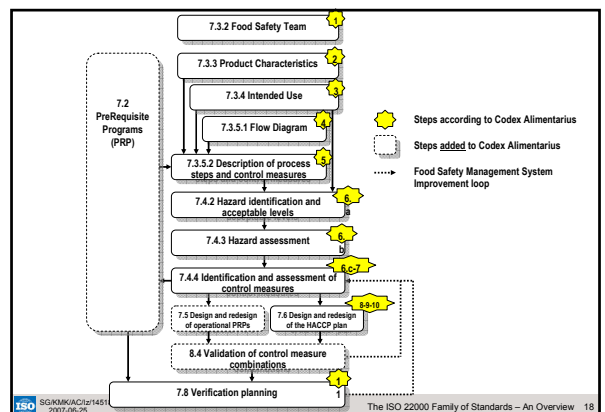
- Commitment
- Food Safety Policy
- Food Safety Management System Planning
- Responsibility & authority
- Team Leader & Team
- Communication (External & Internal) [Innovation]
- Emergency preparedness & response
- Management Review

External communication

- Establish, implement & maintain effective arrangements for pro-active communicating with:
 - Suppliers and contractors
 - Customers, (product information, enquiries, contracts, customer feedback, etc.)
 - Food authorities
 - Other organizations that have an impact on, or will be affected by the effectiveness or updating of the food safety management system

Section 7 – Planning & Realization

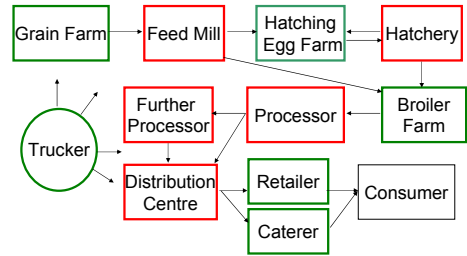
- Prerequisite Programs ("Initial" & "Final")
- Preliminary Steps (team, product characteristics, inputs, intended use, process mapping, etc)
- Hazard analysis (hazards, acceptable levels, assessment, control measures)
- Design of Operational PRPs & CCPs
- Updating "initial" system
- Verification planning
- Traceability system
- Control of non-conformity (corrections & corrective action, recalls, etc)



ISO 22000 & SMEs, Farms, etc

- Standard recognizes that the capacities of food businesses differ (micro to very large)
- ISO 22000 permits two options
 - Site specific development
 - Externally-developed combination of control measures (HACCP-based programs) to specifically address SMEs, farms, etc.
- Consistent with national/regional approaches (e.g. Canadian on-farm programs, national GAPs, EU industry/ "branch" programs)
- Industry program must demonstrate conformity with Section 7

Example of ISO 22000 along the supply chain



- Potentially using **organization-specific** ISO 22000 control measures (red)
- Potentially using **externally-developed** ISO 22000 control measures (green)

ISO/TS 22003:2007 – Audit & Certification

- Technical Specification – Food Safety Specific - covers
 - Requirements for accreditation of Certification Bodies (based on new ISO 17021:2006 which replaced ISO Guides 62 & 66)
 - Qualifications & Competencies of auditors, certification officers, technical experts, etc
 - Certification Process (2 stage audit, etc)
 - Food Business Classifications
 - Minimum Audit Times
 - Multi-site Audits

ISO 22005:2007 – Traceability

- Sets out the "general principles and basic requirements for system design and implementation" of traceability system
- Uses Codex definition of traceability
- Requires food/feed business to:
 - Set food safety, quality & other objectives
 - Design a system that meets regulatory & customer requirements
 - Specify the information to be obtained from its suppliers, collected within itself & provided to its customers
 - Establish procedures, documentation, etc
 - Implement the system (training, etc)
 - Monitor the system
 - Review it regularly & Update

Updating the ISO 22000 Family

- ISO standards are managed & updated systematically
- Technical Committee (TC 34) has on-going responsibility
- ISO 22000 Family
 - Working Groups committed to review & update
 - Additional mechanisms are being considered (e.g. for interpretation & to provide advice on audit practices similar to ISO 9001 groups)



ISO 22000 – New publication



- A new publication, in collaboration with ITC: *ISO 22000, Food safety management systems - An easy-to-use checklist for small business - Are you ready?*
- Enables small businesses to assess their readiness to implement the new ISO 22000 standard
- English and French, Spanish under finalization



ISO 22000 Family Key Points

- Strong management system requirements (ISO 9000 approach)
- Innovates on Codex HACCP foundation
- Useable by full supply chain (input suppliers, farms, processors, transporters, final marketers) & all sizes (micro to global)
- Integrates Food Safety & Traceability
- Emphasizes Regulatory compliance
- Audit & Certification
- Managed for the Future