



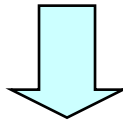
Accreditation Service for Food

Hong Kong Accreditation Service





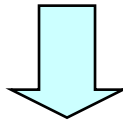
HKAS



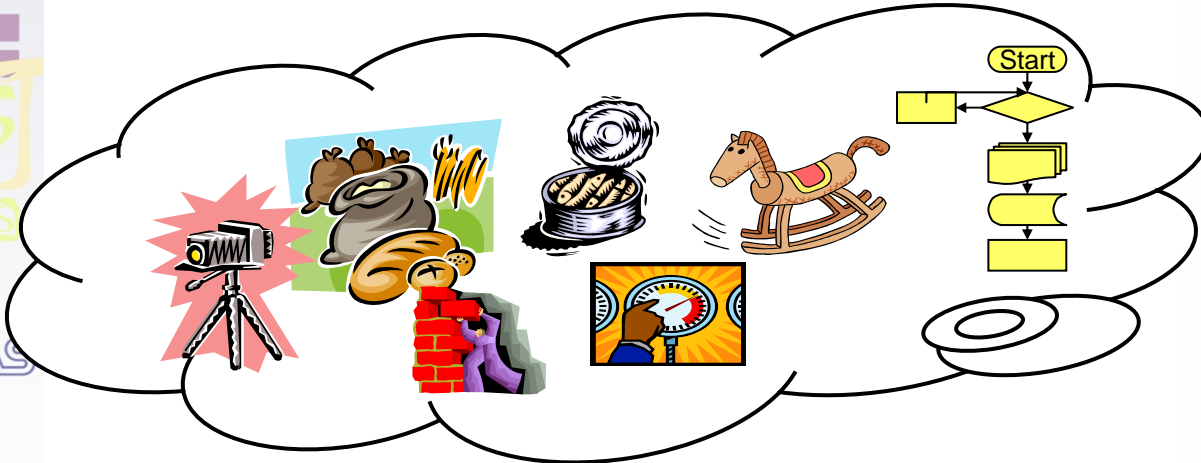
Accredit



Are they
competent?



Test, Certify, Inspect



Are they
acceptable?

Accreditation Schemes

HKAS

Certification
HKCAS
Nov. 1998

Laboratory Testing
HOKLAS
May 1985

Inspection
HKIAS
Dec. 1999

17 Accredited
Certification
Bodies

170 Accredited
Laboratories

20 Accredited
Inspection
Bodies




HKAS Objectives

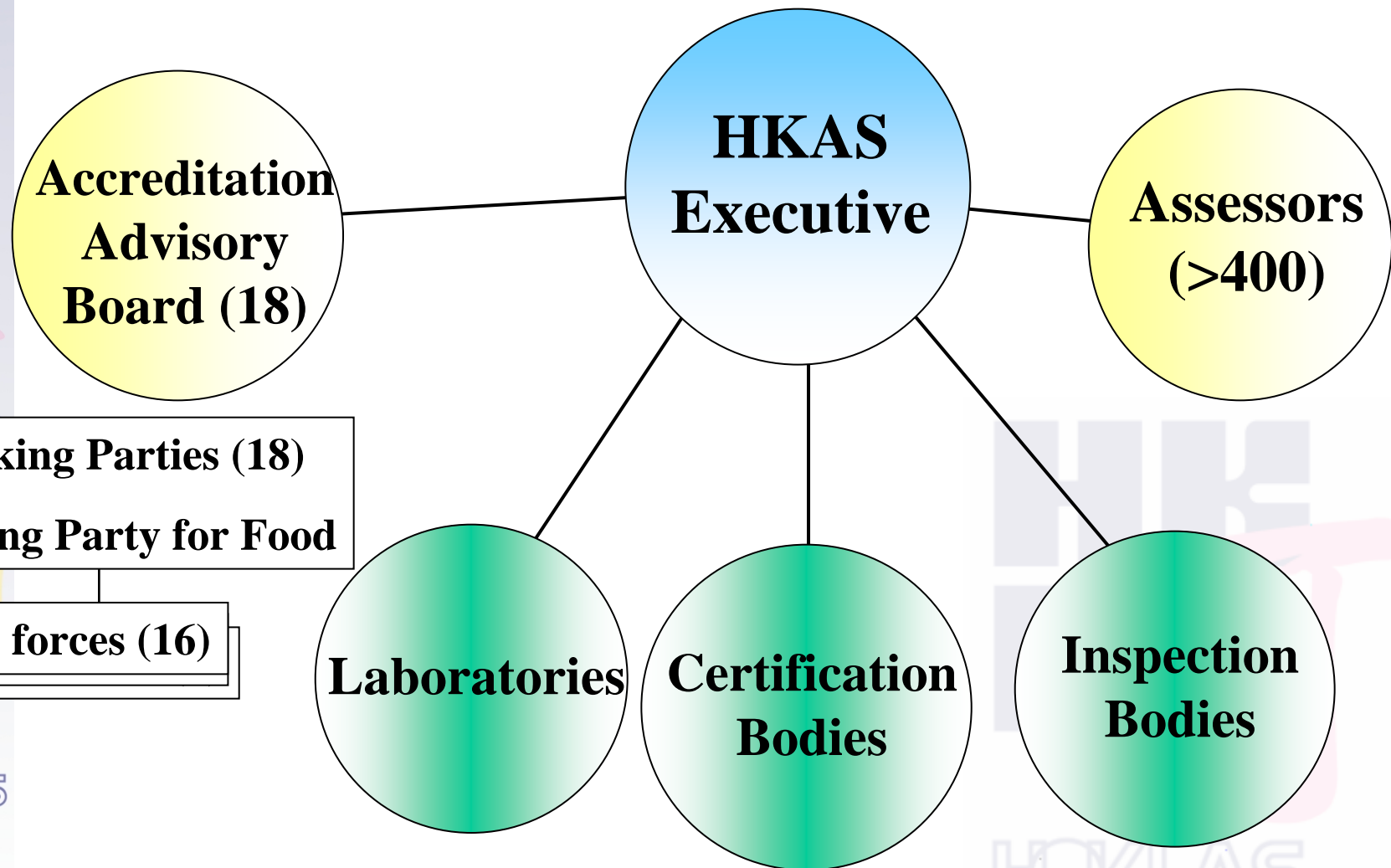
- ✦ To upgrade the standard of operation of certification bodies, inspection bodies and laboratories
- ✦ To offer official recognition to competent certification bodies, inspection bodies and testing and calibration laboratories which meet international standards
- ✦ to promote the acceptance of data, results, reports and certificates obtained by accredited certification bodies, inspection bodies and laboratories
- ✦ to establish mutual recognition agreements with overseas accreditation bodies
- ✦ to eliminate the need for repetition of testing, calibration, certification and inspection in the input of economics and thereby reducing costs and facilitating free trade across borders



Features of HKAS Accreditation

- ⊕ Voluntary
 - ⊕ Based on international standards
 - ⊕ Rigorous assessment and monitoring
 - ⊕ International recognition
 - ⊕ Independent and impartial
- 

HKAS Structure



Scope of Service

HOKLAS

- calibration services
- chemical testing
- Chinese medicine
- construction materials
- electrical & electronic products
- Environmental testing
- Food
- Forensic testing
- medical testing
- miscellaneous
- Physical and mechanical testing
- textiles & garments
- toys & children's products
- Proficiency testing provider
- Reference material producer



Scope of accreditation for food

Composition (water, ash, protein, fat, dietary fibre, sugars, fatty acids, cholesterol, salt)

Contaminants

Metals

Pesticide residues

Veterinary drugs residues

Preservatives

Artificial sweeteners

Hormones

Emulsifiers and stabilisers

Colouring matters

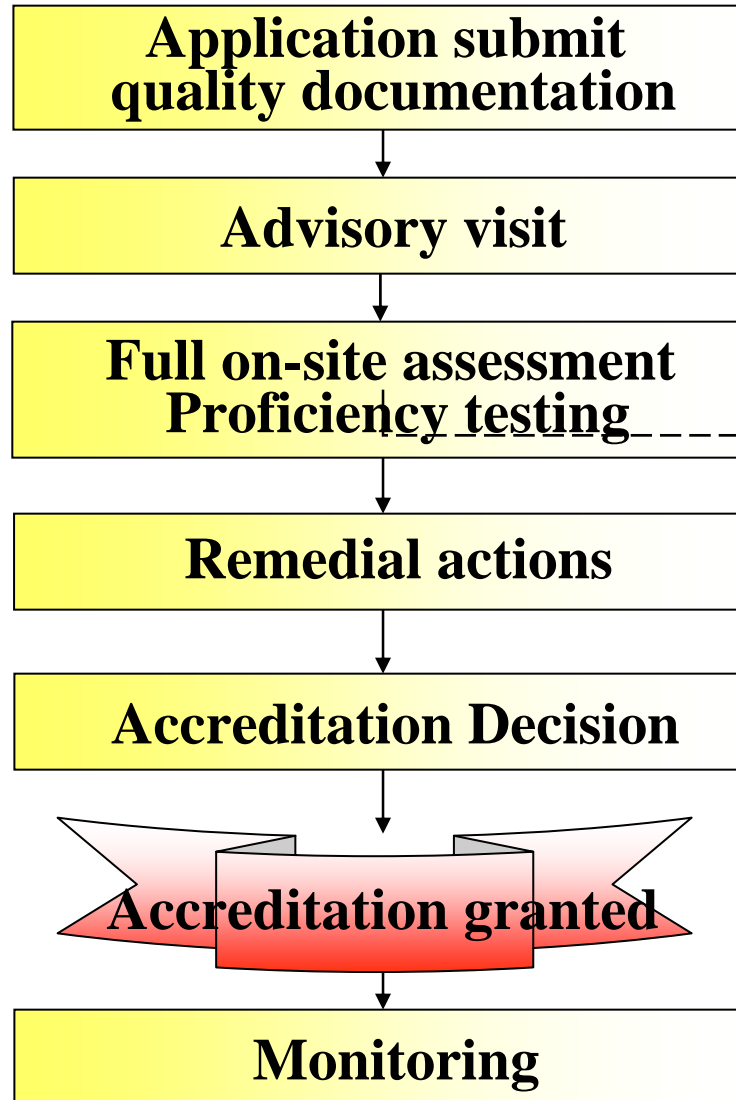
Microscopic examination

Genetically modified food

Food container toxicological tests



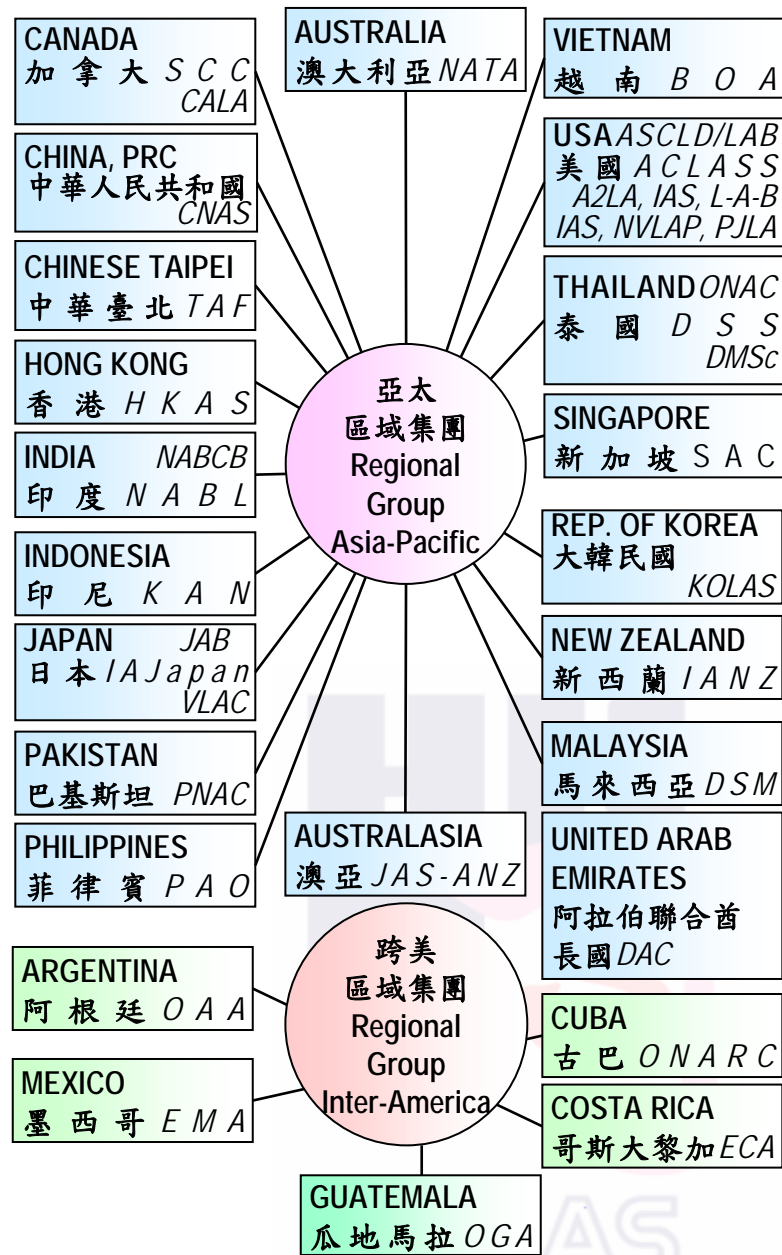
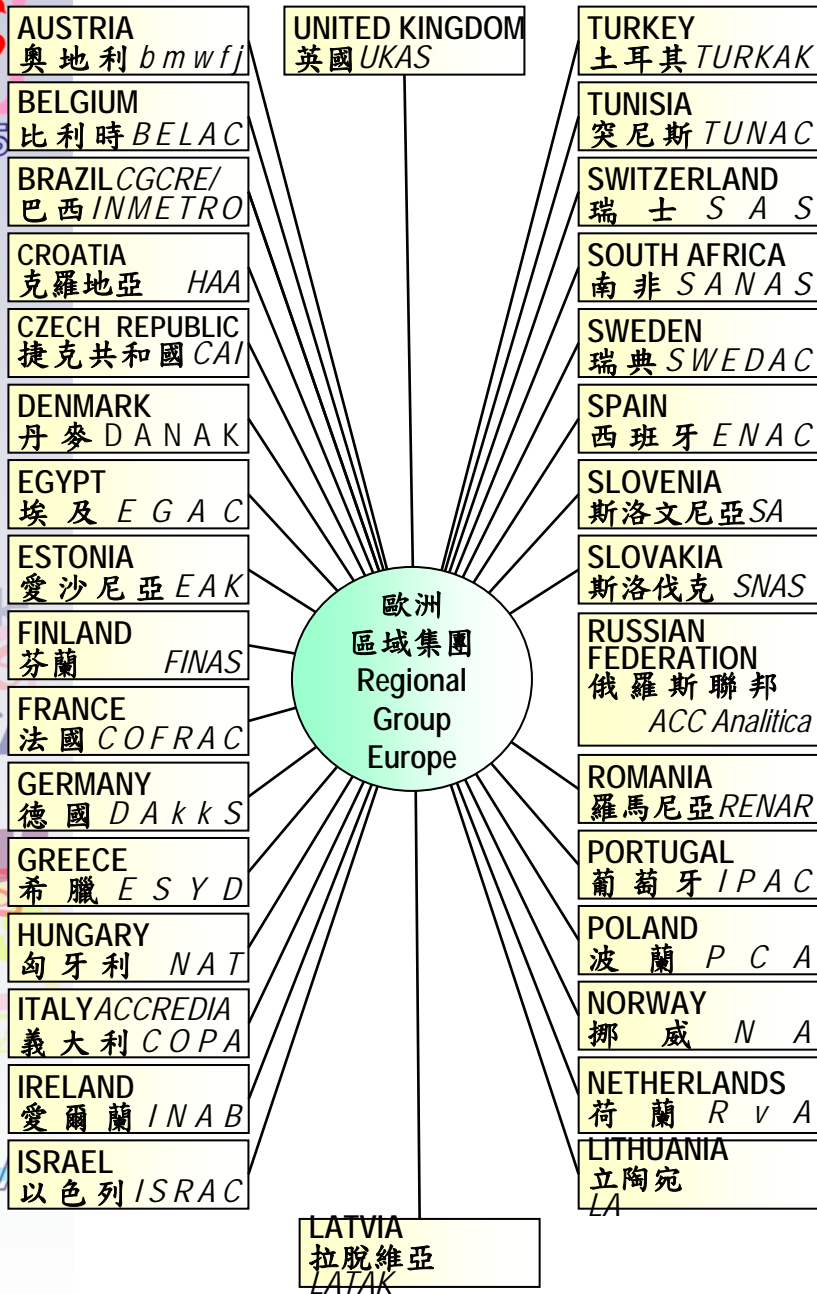
Accreditation Process Flow chart



International Recognition

- Recognised by 79 accreditation bodies in 63 economies (Feb 2100)
- Through multilateral mutual recognition arrangements of ILAC, IAF, APLAC and EA
- Covers testing, medical testing, calibration, inspection, management system certification
- HKAS accreditation recognised internationally

ILAC/IAF MRA





Local Food Testing Labs

- 4 government
- 17 private



Technical criteria for Laboratory Accreditation

- HOKLAS 003
- Basis of technical criteria for laboratory accreditation - **ISO/IEC 17025 : 2005** *General requirements for the competence of testing and calibration laboratories*



Technical criteria for Laboratory Accreditation

5.4.2 Selection of methods

When the customer does not specify the method to be used, the laboratory shall select appropriate methods that have been published either in international, regional or national standards, or by reputable technical organisations, or in relevant scientific tests or journals, or as specified by the manufacturer of the equipment. Laboratory-developed methods or methods adopted by the laboratory may also be used if they are appropriate for the intended use and if they are **validated**.

Technical criteria for Laboratory Accreditation

5.4.4 Non-standard methods

When it is necessary to use methods not covered by standard methods, these shall be subject to agreement with the customer and shall include a clear specification of the customer's requirements and the purpose of the test and/or calibration. The method developed shall have been **validated appropriately before use**.

Method Validation

5.4.5 Validation of methods

5.4.5.1 Validation is the confirmation by examination and the provision of objective evidence that the particular requirements for a specific intended use are fulfilled.

Method Validation

5.4.5.2 The laboratory shall validate non-standard methods, laboratory-designed/developed methods, standard methods used outside their intended scope, and amplifications and modifications of standard methods to confirm that the methods are fit for the intended use. The validation shall be **as extensive as is necessary** to meet the needs of the given application or field of application. The laboratory shall record the results obtained, the procedure used for the validation, and a statement as to whether the method is fit for the intended use.



Method Validation

NOTE 1 Validation may include procedures for sampling, handling and transportation.



Method Validation

NOTE 2 The techniques used for the determination of the performance of a method should be one of, or a combination of, the following:

- calibration using reference standards or reference materials;
- comparison of results achieved with other methods;
- interlaboratory comparisons;
- Systematic assessment of the factors influencing the results based on scientific understanding of the theoretical principles of the method and practical experience.

Method Validation

NOTE 3 When some changes are made in the validated non-standard methods, the influence of such changes should be documented and, if appropriate, a new validation should be carried out.

Method Validation

5.4.5.3 The range and accuracy of the values obtainable from validated methods (e.g. the uncertainty of the results, detection limit, selectivity of the method, linearity, limit of repeatability and/or reproducibility, robustness against external influences and/or cross-sensitivity against interference from the matrix of the sample/test object), as assessed for the intended use, shall be relevant to the customers' need.

Method Validation

NOTE 1 Validation includes specification of the requirements, determination of the characteristics of the methods, a check that the requirements can be fulfilled by using the method, and a statement on the validity.

NOTE 2 As method-development proceeds, regular review should be carried out to verify that the needs of the customer are still being fulfilled. Any change in requirements requiring modifications to the development plan should be approved and authorised.

Method Validation

NOTE 1 Validation is always a balance between costs, risks and technical possibilities. There are many cases in which the range and uncertainty of the values (e.g. accuracy, detection limit, selectivity, linearity, repeatability, reproducibility, robustness and cross-sensitivity) can only be given in a simplified way due to lack of information.



Thank you

