



# QUALITY COUNCIL OF INDIA

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## **TRADITIONAL KNOWLEDGE/INFORMAL LEARNING SECTORS** ***POSSIBLE ROLE OF UNIVERSITIES/IITs***

With the advent of the 21<sup>st</sup> century, there has been a paradigm shift in the processes and systems of learning. While on one hand the modern society is enormously dependent on technology based learning, on the other hand, there is also the realisation for acknowledging the knowledge and skills of a large number of people belonging to the traditional communities. These communities may not have had the good fortune of acquiring their knowledge and skills through well established education systems but nonetheless gained the competency in their respective domains through the knowledge and skills handed down the family lineage, assisting their knowledgeable elders of the community or by mere skilful observation. Thus, there is a huge population comprising of such knowledgeable traditional community practitioners who render valuable service mostly to rural, remote, and not easily accessible areas which if harnessed judiciously can be of immense benefit for the country at large.

In addition, there is a huge, system of non formal education and training in several sectors which the Government has sought to organize into a structured activity through the **Skill India initiative**. In this, recognition is also being accorded to prior learning which may have followed the same routes as mentioned above for traditional knowledge.

The academic institutions are regarded as being at the very apex of the education system in all countries. Advanced degrees from universities no doubt equip the students to stand a better chance of securing jobs as compared to others who may not have had the privilege to get academic degrees. Those who do not have academic degrees may possess the legitimacy and stamp of equivalent competence which could not be understood at that point of time as the awareness or tools for measuring such competency were not available.

Moreover, the universities have created a niche for themselves over the ages in the field of teaching and evaluation in formal education. With the evolution of human society and economy, we see an increasing demand for non-formal and vocational training. This is reflected by the Government of India's Skill movement and various policy initiatives where it has been recognized that today's youth need something



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more than merely stereotyped formal education. There is a growing demand for the acknowledgement of the non-formal domains of knowledge and skills that are deemed fit and relevant for the present day society. These can be harnessed even from the realms of the traditional knowledge systems. The universities have mainly remained unconnected to the need to cater to this segment of imparting employable competence.

Higher education conventionally comprises subjects and levels of courses approved by University Boards of Studies through UG, PG and doctoral programs. The subjects and their educational content is relatively recent as is the modern university system itself. Educational content and its forms of transmission are designed to be relevant for needs of modern society. At the frontiers of university education, there are innovative developments taking place related to use of Information Technology for scaling its reach, new content in several fields like data sciences, artificial intelligence, bio-technology and also new forms of “competency based assessment systems” to improve learning outcomes.

Thus while formal university education is rapidly evolving at another end of the knowledge spectrum, inter-governmental bodies like UNESCO have for several years been drawing attention of universities to rich and evolving, indigenous knowledge content, that exists in several cultures across the world. The knowledge lies in a number of fields like medicine, agriculture, logic, mathematics, fine and performing arts, and disciplines related to the mind and spirit. Such knowledge is advocated by UNESCO to be worthy of recognition and support by higher education institutions because of its depth and contemporary value. This kind of traditional knowledge is classified as “prior learning”. It is mostly located in community settings outside the walls of formal educational institutions and is imparted usually through oral transmission.

There is a worldwide movement towards defining competence based on evaluation of knowledge and skills required to perform a particular job regardless of the route by which such knowledge and skills are acquired. These competencies already existing in the traditional knowledge sectors like yoga and healers and several areas serviced by non-formal sectors like electricians, plumbers, masons, beauticians, massage therapists, home healthcare personnel etc. may be further upgraded, if need arises, to support the modern day requirements by skill up-gradation training. To that end, given the intellectual and procedural advantages that universities are already equipped with, they can go one step further and involve themselves in focussing on the non-formal and vocational sectors including traditional knowledge areas like yoga, folk healing etc where such invaluable knowledge exists. There is no reason



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why universities should be confined to the convention always of imparting and evaluating education and knowledge. With changing times, universities too can, and perhaps should, focus on such knowledge domains which may seem initially to be off-beat and difficult but worthwhile in the long run considering the relevance and benefit they would bring to the communities and country at large. This will also help the universities to shift from imparting education to creating employable youth.

The Universities can opt for either of the two roles which are seen to be increasingly conflicting – training/teaching and evaluation/certification. The Universities can consider giving academic space to the knowledge areas like yoga and folk healing as certificate programmes in prior learning.

While training/teaching to upgrade skills, even those with prior knowledge, can be imparted by any organization, evaluation and certification is expected to be independent and impartial and hence there are rules written for such what are called personnel certification bodies (PrCBs) internationally as embodied in international standard, ISO 17024. A summary of such rules is given at Annex 1.

The Quality Council of India (QCI), as the apex quality promotion body set up by the Government of India, has developed two voluntary certification schemes based on the above concept of competence for certification of Yoga teachers (and Yoga schools) as well as certification of traditional healers and registration of training institutions in the area of traditional healing. These schemes are available at links <http://yogacertification.qci.org.in/> and <http://www.qcin.org/Traditional-Community-Healthcare-Providers.php>

It would be worthwhile for universities to consider to be either **training institutions** in these areas which leverages their expertise in teaching **or evaluation and certification bodies**, which leverages their strengths as examination bodies and would measure and validate the output of self learning or informal trainings imparted by scores of institutions in the market, for the treasure-trove that lies ready to be unearthed and explored to put for meaningful use.

In their role as personnel certification bodies, there is an opportunity for the Universities to also place India on the world map and promote cross border movement of certified professionals under the system of equivalence of certifications operated under the international body, **International Accreditation Forum (IAF)**, through securing accreditation as per ISO 17024 from the **National Accreditation Board for Certification Bodies (NABCB)**, which is a member of IAF and has earned international equivalences for many of its accreditation schemes. A



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note on the international system of equivalence of certifications and accreditations is given at Annex 2.

In order to operate such Standards of International Best Practices and to be accepted worldwide on an equal footing, it is essential that the Universities, as a seat of higher learning, who are already operating the evaluation and certification systems, opt to become Personnel Certification Bodies (PrCBs) and implement the applicable international standard, ISO 17024, for this activity.



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## *Annex 1*

### Requirements under ISO 17024

#### **Introduction**

The International Standard, ISO 17024, has been developed with the objective of achieving and promoting a globally accepted benchmark for organizations operating certification of persons. Certification for persons is one means of providing assurance that the certified person meets the requirements of the certification scheme. Confidence in the respective certification schemes for persons is achieved by means of a globally accepted process of assessment and periodic re-assessments of the competence of certified persons.

One of the characteristic functions of the certification body for persons is to conduct an examination, which uses objective criteria to measure competence and scoring. It is recognized that such an examination, if well planned and structured by the certification body for persons, can substantially serve to ensure impartiality of operations and reduce the risk of a conflict of interest with additional requirements.

While detailed requirements are given in ISO 17024 which may be referred to, a summary of the requirements is given below for enhancing understanding of what it entails to be a PrCB.

#### **1. Terms and definitions**

- **Scheme owner** organization responsible for developing and maintaining a **certification scheme**
- **Certification requirements:** Set of specified requirements, including requirements of the scheme to be fulfilled in order to establish or maintain certification.
- **Certification process:** Activities by which a certification body determines that a person fulfils **certification requirements**, including application, assessment, decision on certification, recertification and use of **certificates** and logo(s)/mark(s)
- **Certificate:** Document issued by a certification body under the provisions of this International Standard indicating that the named person has fulfilled the **certification requirements**
- **Competence:** Ability to apply knowledge and skills to achieve intended results.
- **Qualification:** Demonstrated education, training and work experience, where applicable.
- **Assessment:** Process that evaluates a person's fulfilment of the requirements of the **certification scheme**



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- **Evaluation/ Examination:** Mechanism that is part of the **assessment** which measures a **candidate's competence** by one or more means, such as written, oral, practical and observational, as defined in the **certification scheme**
- **Evaluator / Examiner:** Person competent to conduct and score an **evaluation /examination** where the **evaluation/examination** requires professional judgement.
- **Invigilator:** Person authorized by the certification body who administers or supervises an **evaluation/examination** but does not evaluate the **competence** of the **candidate**  
NOTE Other terms for invigilator are proctor, test administrator, supervisor.
- **Applicant:** Person who has submitted an application to be admitted into the **certification process**
- **Candidate:** **Applicant** who has fulfilled specified prerequisites and has been admitted to the **certification process**
- **Impartiality:** Presence of objectivity.  
NOTE 1 Objectivity means that conflicts of interest do not exist, or are resolved, so as not to adversely influence subsequent activities of the certification body  
NOTE 2 Other terms that are useful in conveying the element of impartiality are - independence, freedom from conflict of interests, freedom from bias, lack of prejudice, neutrality, fairness, open-mindedness, even-handedness, detachment, balance.
- **Appeal:** Request by **applicant, candidate** or certified person for reconsideration of any decision made by the certification body related to her/his desired certification status.
- **Complaint :** Expression of dissatisfaction, other than **appeal**, by any individual or organization to a certification body, relating to the activities of that body or a certified person, where a response is expected.
- **Interested party:** Individual, group or organization affected by the performance of a certified person or the certification body.
- **Surveillance :** Periodic monitoring, during the periods of certification, of a certified person's performance to ensure continued compliance with the certification scheme.
- **Certification scheme :** Defines **Competence** the ability to apply knowledge and skills to achieve intended results and other requirements related to specific occupational or skilled categories of persons specified for the **Scheme** by the **Scheme Owners** who develop and maintain the **Certification Scheme**.
- **Certification process :** Activities by which a certification body determines that a person fulfils **Certification Requirements**, including requirements of the scheme to be fulfilled in order to establish or maintain certification and issue of **Certificates** by the certification body, indicating that the named person has fulfilled the **Certification Requirements** through the mechanism of the **Assessment Process** which measures the candidate's competence by one or



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more means, such as written, oral, practical and observational, as defined in the **Certification Scheme.**

## **2. Requirements for Certification Bodies operating Certification of Persons**

### **2.1 Legal matters**

The certification body shall be a legal entity, or a defined part of a legal entity, such that it can be held legally responsible for its certification activities. A governmental certification body is deemed to be a legal entity on the basis of its governmental status.

### **2.2 Responsibility for decision on certification**

The certification body shall be responsible for, shall retain authority for, and shall not delegate, its decisions relating to certification, including the granting, maintaining, recertifying, expanding and reducing the scope of the certification, and suspending or withdrawing the certification.

### **2.3 Management of impartiality**

The certification body shall document its structure, policies and procedures to manage impartiality and to ensure that the certification activities are undertaken impartially in relation to its applicants, candidates and certified persons. It shall not allow commercial, financial or other pressures to compromise impartiality. It shall have a statement publicly accessible without request that it understands the importance of impartiality in carrying out its certification activities, manages conflict of interest and ensures the objectivity of its certification activities. It shall identify threats to its impartiality on an ongoing basis and include threats that arise from its activities, from its related bodies, from its relationships, or from the relationships of its personnel. It shall analyse, document and eliminate or minimize the potential conflict of interests arising from its certification activities and be able to demonstrate how it eliminates, minimizes or manages such threats.

### **2.4 Finance and liability**

The certification body shall have the financial resources necessary for the operation of a certification process and have adequate arrangements (e.g. insurance or reserves) to cover associated liabilities.

### **2.5 Structural requirements - Management & organization structure**

The certification body activities shall be structured and managed so as to safeguard impartiality and document its organizational structure, describing the duties, responsibilities and authorities of management, certification personnel and any committee. When the certification body is a defined part of a legal entity,



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documentation of the organizational structure shall include the line of authority and the relationship to other parts within the same legal entity.

## **2.6 Resource requirements**

### **2.6.1 General personnel requirements**

The certification body shall manage and be responsible for the performance of all personnel involved in the certification process. It shall have sufficient personnel available with the necessary competence to perform certification functions relating to the type, range and volume of work performed. The certification body shall provide its personnel with documented up-to-date instructions describing their duties and responsibilities. The records of personnel regarding qualifications, training, experience, professional affiliations, professional status, competence and known conflicts of interest be maintained. Personnel acting on the certification body's behalf shall keep confidential all information obtained or created during the body's certification activities. The certification body shall require its personnel to sign a document by which they commit themselves to comply with the rules defined by the certification body, including those relating to confidentiality, impartiality and conflict of interests.

### **2.6.2. Requirements for examiners**

Examiners shall meet the requirements of the certification body. The selection and approval processes shall ensure that examiners understand the relevant certification scheme; are able to apply the examination procedures and documents; have competence in the field to be examined; are fluent, both in writing and orally in the language of examination; in circumstances where an interpreter or a translator is used, the certification body shall have procedures in place to ensure that it does not affect the validity of the examination; have identified any known conflicts of interest to ensure impartial judgements are made.

The certification body shall monitor the performance of the examiners and the reliability of the examiners' judgements. Where deficiencies are found, corrective actions shall be taken. Monitoring procedures for examiners include on-site observation, review of examiners' reports, feedback from candidates.

If an examiner has a potential conflict of interest in the examination of a candidate, the certification body shall undertake measures to ensure that the confidentiality and impartiality of the examination are not compromised. These measures shall be recorded.

## **2.7 Records and information requirements**

### **2.7.1 Records of applicants, candidates and certified persons**



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The certification body shall maintain records to confirm the status of a certified person. The records shall demonstrate that the certification or recertification process has been effectively fulfilled, particularly with respect to application forms, assessment reports and other documents relating to granting, maintaining, recertifying, expanding and reducing the scope, and suspending or withdrawing certification. It shall be done in such a way as to ensure the integrity of the process and the confidentiality of the information. The records shall be kept for an appropriate period of time, for a minimum of one full certification cycle, or as required by recognition arrangements, contractual, legal or other obligations. It shall have enforceable arrangements to require that the certified person inform the certification body, without delay, of matters that can affect the capability of the certified person to continue to fulfil the certification requirements.

## **2.7.2 Public information**

The certification body shall make publicly available without request information regarding the scope of the certification scheme and a general description of the certification process; verify and provide information, upon request, regarding certification activities, except where the law requires such information not to be disclosed; all pre-requisites of the certification scheme shall be listed and the list shall be made publicly available without request and information provided by the certification body, including advertising, shall be accurate and not misleading.

## **2.7.3 Confidentiality**

The certification body shall establish documented policies and procedures for the maintenance and release of information, shall ensure that information obtained during the certification process, or from sources other than the applicant, candidate or certified person, is not disclosed to an unauthorized party without the written consent of the individual (applicant, candidate or certified person), except where the law requires such information to be disclosed; when required by law to release confidential information, the person concerned shall, unless prohibited by law, be notified as to what information will be provided.

## **2.7.4 Security**

The certification body shall develop and document policies and procedures necessary to ensure security throughout the entire certification process and shall have measures in place to take corrective actions when security breaches occur. Security policies and procedures shall include provisions to ensure the security of examination and prevent fraudulent examination practices.



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**Annex 2**

## International Equivalence through Accreditation

Accreditation is the process which determines the technical competence, reliability and integrity of conformity assessment bodies supporting in selection of an organization to carry out conformity assessment activities like testing, calibration, inspection or certification. Accreditation thus helps to underpin the credibility, safety and performance of goods and services. With the increase in global trade it is essential that the results of conformity assessment activities are assured and there is global acceptance of the reports/results. This is accomplished through operation of accreditation system as per international standards like ISO/IEC 17020 for inspection bodies, ISO/IEC 17021 for management systems certification bodies, ISO/IEC 17024 for certification bodies for personnel, ISO/IEC 17025 for laboratories and ISO/IEC 17065 for product/process/service certification bodies.

India has set up its own accreditation bodies, namely, the **National Accreditation Board for Certification Bodies (NABCB)** and the **National Accreditation Board for Testing and Calibration Laboratories (NABL)**, under the umbrella of the *Quality Council of India*, which accredit inspection / certification bodies and laboratories respectively.

Internationally, there are world associations of accreditation bodies called the **International Accreditation Forum (IAF)** for accreditation bodies for certification bodies and **International Laboratory Accreditation Cooperation (ILAC)** for accreditation bodies for labs and inspection bodies. Further, there are regional bodies, namely, **Pacific Accreditation Cooperation (PAC)** for accreditation bodies for certification bodies and **Asia Pacific Laboratory Accreditation Cooperation (APLAC)** for accreditation bodies for labs and inspection bodies in Asia Pacific region of which NABCB and NABL are members. There are similar regional bodies in Europe, the **European Accreditation Cooperation**, North and South America, the **Inter American Accreditation Cooperation**, **African Accreditation Cooperation** in Africa and **Arab Accreditation Cooperation** covering Arab countries.

The IAF / ILAC evaluate the regional bodies every 4 years and recognize them; the regional bodies evaluate individual accreditation bodies as per applicable international standard, ISO/IEC17011, based on which the accreditation bodies can sign the **Mutual Recognition Arrangements** of the regional bodies which in turn makes them eligible to sign the **Mutual Recognition Arrangements for IAF / ILAC**. This confers international equivalence on accreditation offered by any accreditation body which is signatory to MRAs, which in turn confers international equivalence on



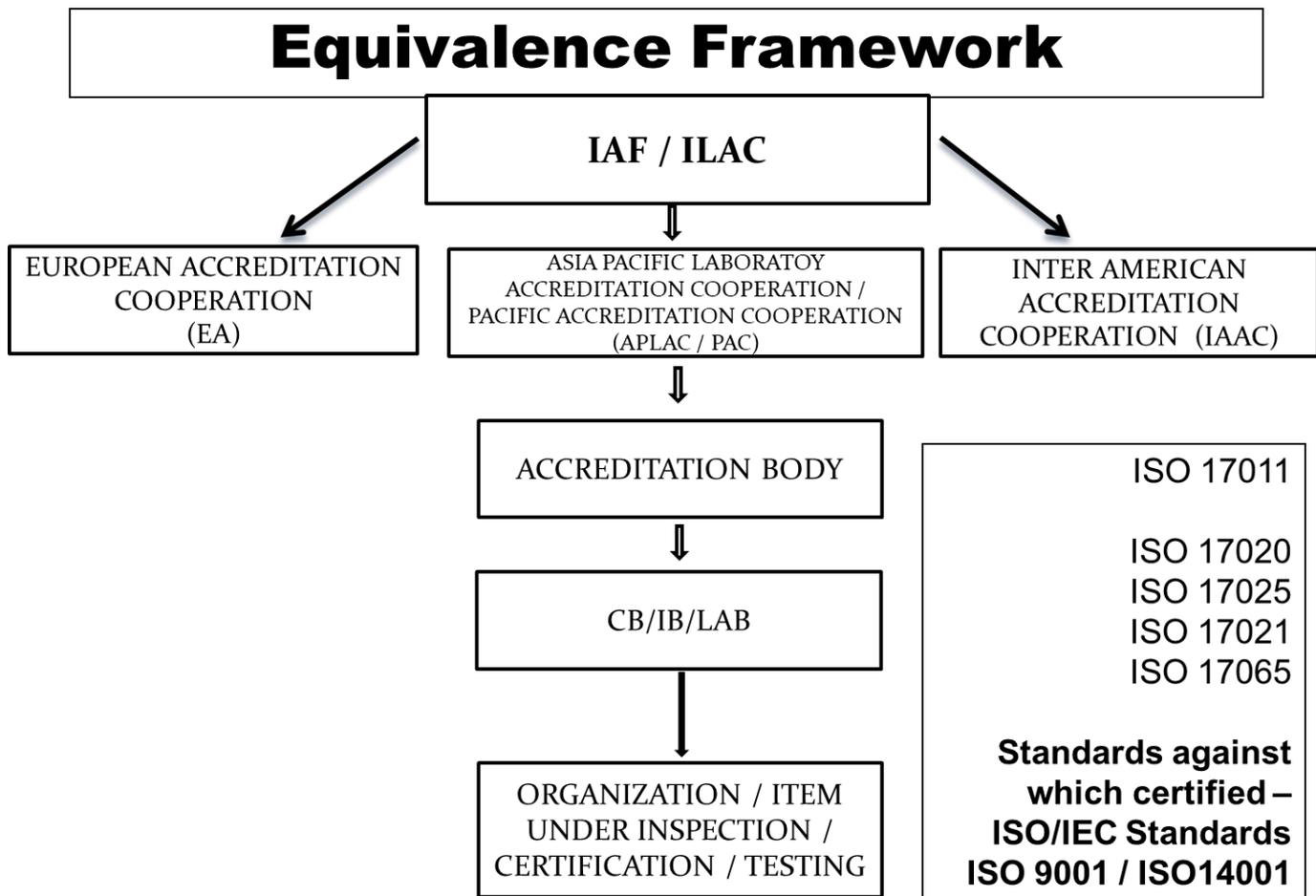
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the inspection / certification / testing done by the accredited conformity assessment bodies. Therefore, the governments and the voluntary sector worldwide are increasingly relying on accredited third party conformity assessment bodies.

NABCB and NABL have acquired all possible international equivalences and therefore are at par with the accreditation bodies in other countries in Asia Pacific region, Europe and other parts of the world and in some cases like Information security and Food safety, better than them.

Accreditation of universities as personnel certification bodies as per relevant accreditation standard, ISO/IEC 17024, can result in international acceptance through the above system and the personnel in different sectors can be certified as per requirements of ISO/IEC 17024.

## Schematic diagram representing international equivalence framework





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