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Information technology — IT Enabled Services-Business Process Outsourcing (ITES-BPO) lifecycle processes —

Part 2: Process assessment model (PAM)

Technologies de l'information — Processus du cycle de vie de la délocalisation du processus d'affaires des services activés par IT —

Partie 2: Modèle d'évaluation du processus (PAM)

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Foreword

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The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: Foreword - Supplementary information

The committee responsible for this document is ISO/IEC JTC 1, *Information technology*, SC 40, *IT Service Management and IT Governance*.

A list of all parts in the ISO/IEC 30105 series can be found on the ISO website.

Introduction

ITES-BPO services encompass the delegation of one or more IT enabled business processes to a service provider who uses an appropriate technology to deliver a service. Such a service provider manages, delivers, improves and administers the outsourced business processes in accordance with predefined and measurable performance metrics. This covers diverse business process areas such as finance, human resource management, administration, health care, banking and financial services, supply chain management, travel and hospitality, media, market research, analytics, telecommunications, manufacturing, etc. These services provide business solutions to customers across the globe and form the part of the core service delivery chain for customers.

ISO/IEC 30105 (all parts) specifies the lifecycle processes requirements involved in the ITES-BPO industry.

— It provides an overarching standard for all aspects of ITES-BPO industry from the view of the service provider that performs the outsourced business processes. This is applicable for any ITES-BPO service provider providing services to customers through contracts and in industry verticals.

— It covers the entire outsourcing lifecycle and defines the processes that are considered to be good practices.

— It is an improvement standard that enables risk determination and improvement for service providers performing outsourced business processes. It also serves as a process reference model for service providers.

— It focuses on IT enabled business processes which are outsourced.

— It is generic and can be applied to all IT enabled business process outsourced services, regardless of type, size and the nature of the services delivered.

— Process improvement implemented using ISO/IEC 30105 (all parts) can lead to a clear return on investment for customers and service providers.

— Alignment to ISO/IEC 30105 (all parts) can improve consistency, delivery quality and predictability in delivery of services.

Figure 1 illustrates the key entities and relationships involved in an ITES-BPO service. It includes the customer, the ITES-BPO service provider and various levels of suppliers. This is in line with the supply chain relationship depicted in ISO/IEC 20000-1:2011, 7.2.

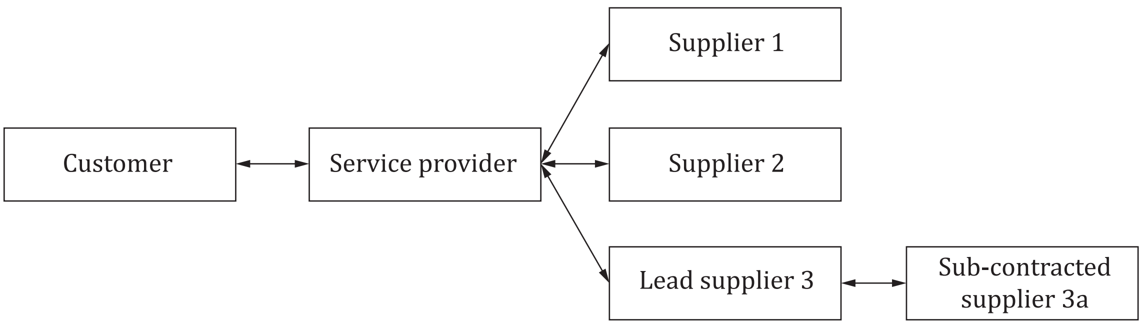

Figure 1 — ITES-BPO key entities

This document details the process assessment model (PAM). This PAM contains process definitions of ITES-BPO lifecycle defined in ISO/IEC 30105-1 and a model suitable for assessing a specified process quality characteristic. The outcomes in the PAM are clearly defined observable results, aligned to the business benefits derived by the customer and service provider.

This document defines a process assessment model that is an improvement standard that enables risk determination and improvement for ITES-BPO service providers. ISO/IEC 20000-1 is a service management system standard which defines the criteria for a conformity assessment. Whilst there is potential for overlaps between this document and ISO/IEC 20000-1, in fact, they complement each other. Annex C describes the potential overlaps and differences, and their complementary nature.

Information technology — IT Enabled Services-Business Process Outsourcing (ITES-BPO) lifecycle processes —

Part 2: Process assessment model (PAM)

1 Scope

ISO/IEC 30105 specifies the lifecycle process requirements performed by the IT enabled business process outsourcing service provider for the outsourced business processes. It defines the processes to plan, establish, implement, operate, monitor, review, maintain and improve its services. This document:

— covers IT enabled business processes that are outsourced;

— is not intended to cover IT services but includes similar, relevant process for completeness;

— is applicable to the service provider, not to the customer;

— is applicable to all lifecycle processes of ITES-BPO;

— serves as a process assessment model for organizations providing ITES-BPO services that:

  — conforms to the requirements of ISO/IEC 33004;

  — supports the performance assessment by providing indicators for the interpretation of the process purposes and outcomes, as defined in ISO/IEC 24774, and the process attributes, as defined in ISO/IEC 33020.

A process assessment model consists of a set of indicators for process performance and process capability. The indicators are used as a basis for collecting the objective evidence that enables an assessor to determine ratings. The set of indicators included in this document is not intended to be an all-inclusive set nor is it intended to be applicable in its entirety. Supersets and subsets that are appropriate to the context and scope of the assessment should be selected.

The process assessment model in this document is directed at assessment sponsors and competent assessors who wish to select a model, and associated documented assessment process, for the ITES-BPO lifecycle processes, for risk determination or process improvement.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO/IEC 33004:2015, *Information technology — Process assessment — Requirements for process reference, process assessment and maturity models*

ISO/IEC 30105-3, *Information Technology — IT enabled services-business process outsourcing (ITES-BPO) lifecycle processes — Part 3: Measurement framework (MF) and organization maturity model (OMM)*

3 Terms and definitions

For the purpose of this document, the terms and definitions given in ISO/IEC 30105-4, ISO/IEC 33001 and ISO/IEC TR 20000-10 apply.

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— IEC Electropedia: available at http://www.electropedia.org/

— ISO Online browsing platform: available at http://www.iso.org/obp

3.1 General

In ISO/IEC 33001, the process assessment model is described as a model suitable for the purpose of assessing a specified process quality characteristic, based on one or more process reference models.

The process reference model defined in ISO/IEC 30105-1, associated with the process attributes defined in this document, establishes a process assessment model that provides a common basis for performing assessments on ITES-BPO lifecycle processes, enabling the results to be reported using a common rating scale. A.2 in Annex A provides the requirements for process assessment models.

The process assessment model defines a two-dimensional model of process capability.

— **Process dimension**: Processes are defined and classified into process categories.

— **Capability dimension**: A set of process attributes grouped into capability levels is defined.

The process attributes provide the measurable characteristics of process capability.

The ITES-BPO process reference model defined in ISO/IEC 30105-1 and the capability dimension defined in ISO/IEC 33020 cannot be used alone as the basis for conducting reliable and consistent assessments of process capability, since the level of detail available is not sufficient. The process assessment model defined in this document has been derived from the measurement framework defined in ISO/IEC 30105-3, adapted to be suitable for ITES-BPO service providers.

3.2 Structure of the ITES-BPO process assessment model

3.2.1 Relationship to process reference model

The ITES-BPO process assessment model extends the process reference model provided in ISO/IEC 30105-1 with the definition of the ITES-BPO assessment indicators and their use. Assessment indicators are indicators of process performance and process capability. They are defined to objectively support an assessor's objective judgment of the performance and capability of an implemented process. The ITES-BPO process descriptions meet the following requirements:

— a process is described in terms of its purpose and process outcomes;

— the set of process outcomes will be necessary and sufficient to achieve the purpose of the process;

— process descriptions shall not contain or imply aspects of the process quality characteristic beyond the lowest level of its intended measurement scale.

3.2.2 Process categories and processes

Figure 2 lists the processes from ISO/IEC 30105-1 that are included in the process dimension of the process assessment model for ITES-BPO. It includes all aspects of an ITES-BPO outsourced service, from developing an ITES-BPO solution through service delivery and to transitioning out. It includes the leadership, relationship management and enabling processes which support the outsourced business across its lifecycle.

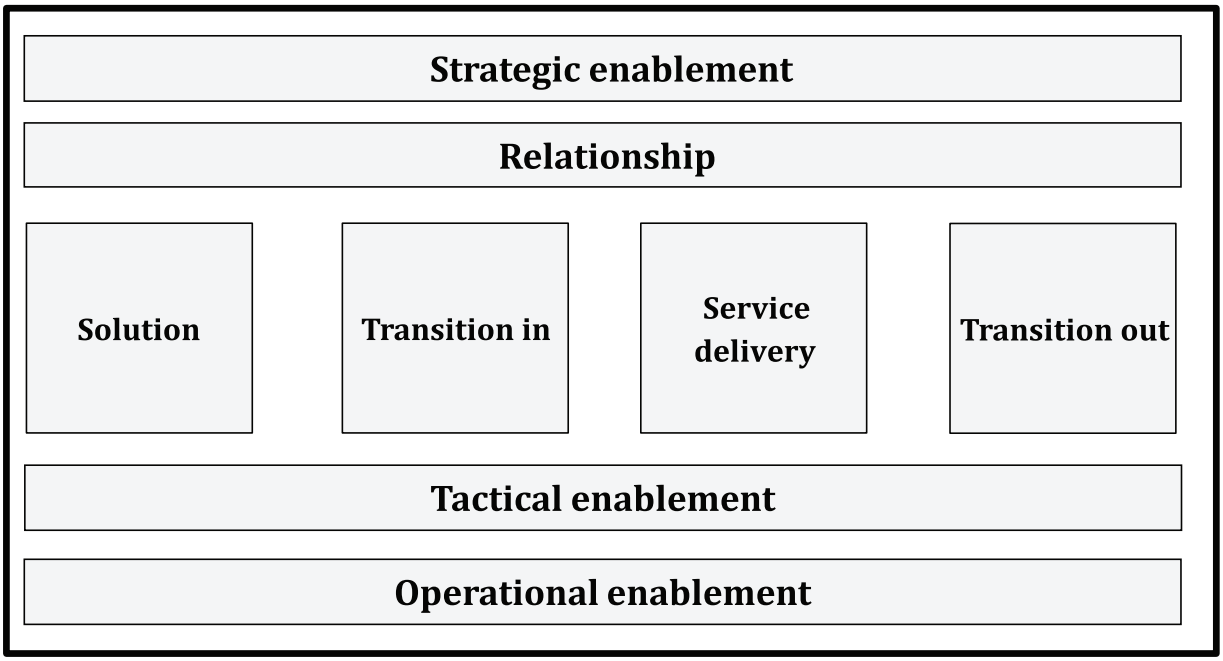

Figure 2 — ITES-BPO lifecycle process categories

The ITES-BPO process categories are:

— **Strategic enablement processes**: include strategic direction and review of the business performance against plan for the service provider organization and innovation process to bring in breakthrough changes;

— **Relationship processes**: cover the relationship of the service provider with the customer and the suppliers;

— **Solution processes**: include details on how the ITES-BPO solution is envisaged and the contract developed and managed;

— **Transition in processes**: cover the movement of business process delivery from the customer to the service provider, establishing the required management, people and infrastructure capability, and concluding with piloting the transitioned service;

— **Service delivery processes**: include all the processes that are required for the day to day management and delivery of ITES-BPO services;

— **Transition out process**: covers the movement of the business process delivery back to the customer or to a different service provider;

— **Tactical enablement processes**: involve a set of processes that enables achievement of the objective of the core service delivery processes; these are tactical in nature;

— **Operational enablement processes**: involve a set of processes that ensures day-to-day operations of service delivery are supported and are performed alongside the service delivery processes.

The process categories and processes in the ITES-BPO process reference model which underpin the process dimension of the ITES-BPO process assessment model are shown in Figure 3.

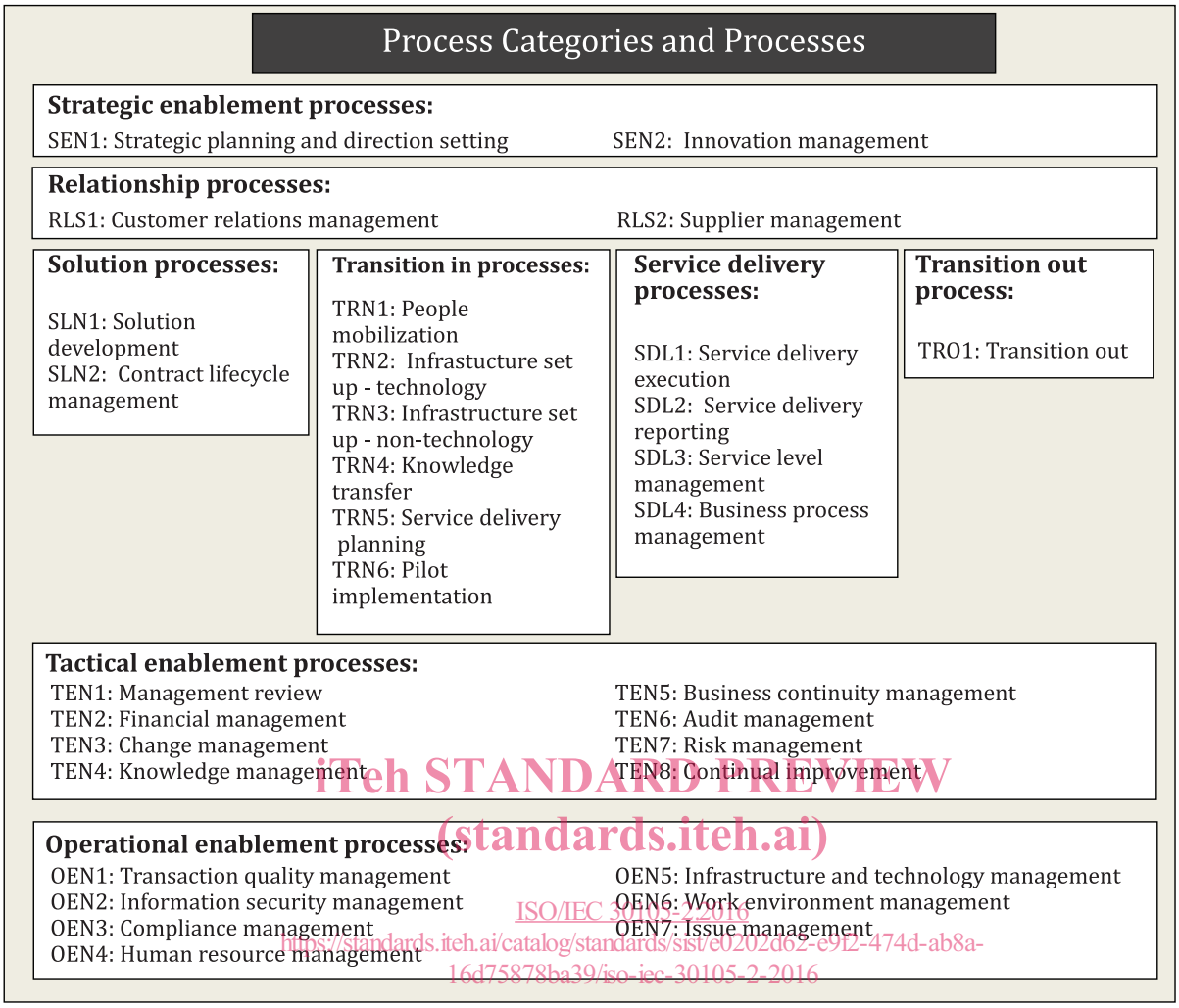

Figure 3 — ITES-BPO lifecycle process categories and processes

3.2.3 Process dimension

All processes in Figure 3 are included within the process dimension of the process assessment model.

Each process in the PAM is described by a purpose statement which contains objectives of the process and a set of specific expected outcomes. The outcomes are associated with the process purpose statements, and indicate the expected positive result of the process performance.

Satisfying the purpose statements of a process represents the only step in achieving a level 1 process capability where the expected outcomes are observable.

3.2.4 Capability dimension

Process capability levels are defined in ISO/IEC 30105-3 and detailed definitions of the process capability levels and process attributes are set out in Clause 6 together with the relevant process capability indicators. Process capability is expressed in the PAM by grouping process assessment indicators into capability levels.

Process attributes are process features which can be evaluated on a scale of achievement to provide a process capability measure. Each process attribute describes a feature of the overall capability in managing and improving process effectiveness in achieving its process purpose and contributing to the organization's business goals.

A capability level is a set of process assessment indicators that together describe an ability to operate and perform a process at a given capability level. The existence or not of evidence to meet these process assessment indicators helps determine the capability levels. The levels constitute a rational path for improving capability for any process and are defined in ISO/IEC 30105-3.

There are six capability levels incorporating nine process attributes.

Level 0: Incomplete process

The process is not implemented or fails to achieve the process purpose.

At this level, there is little or no evidence of any systematic achievement of the process purpose.

Level 1: Performed process

The implemented process achieves its process purpose.

Level 2: Managed process

The previously described "Performed" process is implemented in a managed fashion (planned, monitored and adjusted) and its work products are appropriately established, controlled and maintained.

Level 3: Established process

The previously described "Managed" process is implemented using a defined process that is capable of achieving the process outcomes.

Level 4: Predictable process

The previously described "Established" process now operates within defined limits to achieve the process outcomes. Quantitative management needs are identified, measurement data are collected and analysed to identify causes of variation.

Level 5: Innovating process

The previously described "Predictable" process is continually improved to respond to organizational change.

Within the process assessment model, the measure of capability is based upon the nine process attributes (PA) defined in ISO/IEC 30105-3. Process attributes are used to determine whether a process has reached a given capability. Each attribute measures a particular aspect of the process capability.

At each level there is no ordering between the process attributes; each attribute addresses a specific aspect of the capability level. The list of process attributes is shown in Table 1.

Table 1 — Capability levels and process attributes

Process attribute ID	Capability levels and process attributes
	Level 0: Incomplete process
	Level 1: Performed process
PA 1.1	Process performance
	Level 2: Managed process
PA 2.1	Performance management
PA 2.2	Work product management
	Level 3: Established process
PA 3.1	Process definition
PA 3.2	Process deployment
	Level 4: Predictable process

Table 1 *(continued)*

Process attribute ID	Capability levels and process attributes
PA 4.1	Quantitative analysis
PA 4.2	Quantitative control
	Level 5: Innovating process
PA 5.1	Process innovation
PA 5.2	Process innovation implementation

The process attributes are evaluated on a six-point ordinal scale of achievement, as defined in ISO/IEC 30105-3. They provide insights into the specific aspects of process capability required to support process improvement and risk determination.

Within the process assessment model, the measure of capability is based upon the nine process attributes (PA) defined in ISO/IEC 30105-3 and listed in 6.2.

3.3 Assessment indicators

3.3.1 Overview

The process assessment model is based on the principle that the capability of a process can be assessed by demonstrating the achievement of process attributes on the basis of evidences related to assessment indicators.

There are two types of assessment indicators: process capability indicators (PCI), which apply to capability levels 1 to 5 and process performance indicators (PPI), which apply exclusively to capability level 1. These indicators are defined in 4.3.2.

Process capability indicators enable assessment of the extent of achievement of a process attribute in the implemented process. These indicators concern significant activities, resources or results associated with the achievement of the attribute purpose by a process.

Types of process capability indicators are:

— generic practice (GP);

— generic resource (GR);

— generic work product (GWP).

As additional indicators for supporting the assessment of a process at level 1, each process has a set of process performance indicators in the process dimension. These are used to measure the degree of achievement of the process performance attribute for the process assessed.

Types of process performance indicators are:

— base practice (BP);

— work product (WP).

The performance of base practices indicates the extent of achievement of the process purpose and process outcomes. Work products are either used or produced (or both) when performing the process.

The process performance and process capability indicators defined in the ITES-BPO process assessment model represent types of objective evidence that can be found in an implementation of an ITES-BPO process. Therefore, these can be used to judge achievement of capability.

Figure 4 shows how the assessment indicators are related to process performance and process capability.

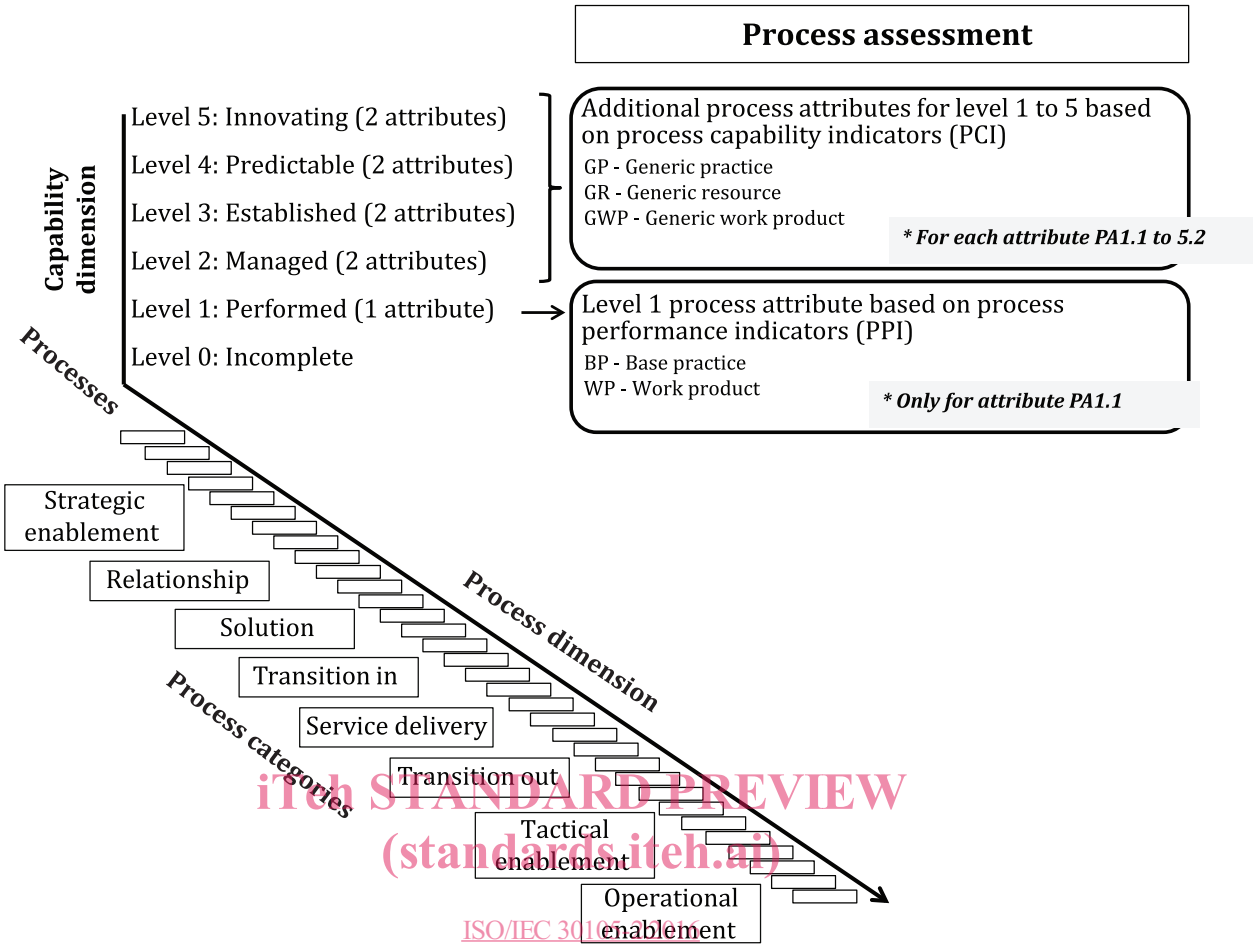

Figure 4 — Process attributes and process assessment indicators

3.3.2 Process capability indicators (PCI)

The three types of process capability indicators related to levels 1 to 5 are identified in Figure 5. They are intended to be applicable to all processes and are defined for ITES-BPO lifecycle processes in Clause 6.

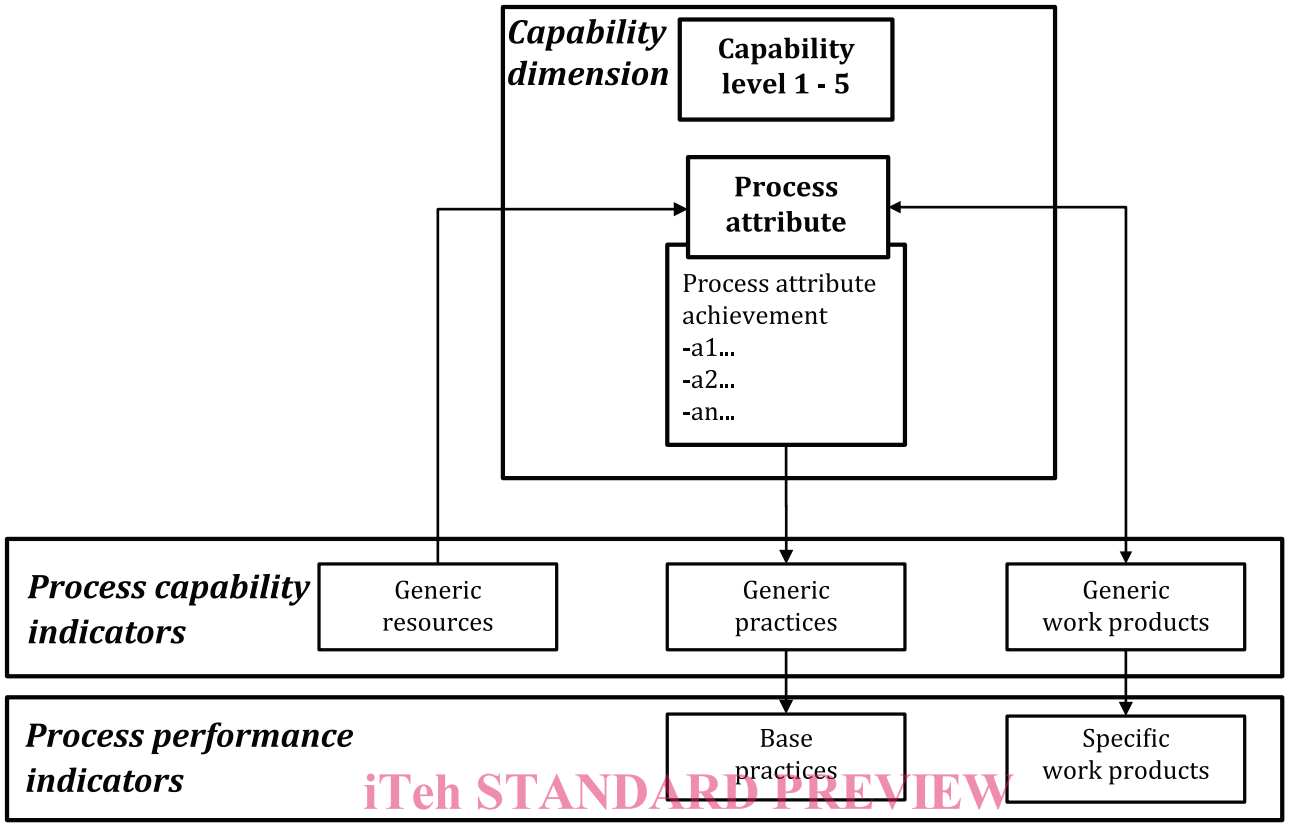

Figure 5 — Process assessment indicators

All the process capability indicators relate to the process attributes defined in the capability dimension of the process assessment model. They represent the type of evidence that supports judgments of the extent to which the attributes are achieved. Evidence of their effective performance or existence supports the judgment of the degree of achievement of the attribute. The generic practices are the principal indicators of process capability.

The **generic practice (GP)** indicators are activities of a generic type and provide guidance on the implementation of the attribute's characteristics. They support the achievement of the process attribute and many of them concern management practices, i.e. practices that are established to support the process performance as it is characterized at level 1. Table A.1 lists the mappings of the GPs to the achievements associated with each process attribute.

During the evaluation of process capability, the primary focus is on the performance of the generic practices. In general, performances of all generic practices are expected for full achievement of the process attribute.

The **generic resource (GR)** indicators are associated resources that can be used when performing the process in order to achieve the attribute. These resources can include human resources, tools, methods and infrastructure. The availability of a resource indicates the potential to fulfill the purpose of a specific attribute.

The assessor should interpret the generic resources according to the process assessed. For example, for PA 2.1: human resources with identified objectives, responsibilities and authorities, an assessor looks for roles with identified objectives, responsibilities and authorities in service delivery management processes, but for organizational processes looks for governance structures (e.g. mandated committees, positions) with identified objectives, responsibilities and authorities.

The **generic work product (GWP)** indicators are sets of characteristics that are expected to be evident in work products of generic types as a result of achievement of a process attribute. The generic work products form the basis for the classification of the work products defined as process performance

indicators. They represent basic types of work products that can be inputs to or outputs from all types of process.

These three types of indicators help to establish objective evidence of the extent of achievement of specified process attribute.

Due to the fact that level 1 capability of a process is only characterized by the measure of the extent to which the process purpose is achieved, the process performance attribute (PA.1.1) has a single generic practice indicator (GP.1.1.1). In order to support the assessment of PA.1.1, and to amplify the process performance achievement analysis, additional process performance indicators are defined in the process assessment model.

3.3.3 Process performance indicators (PPI)

There are two types of process performance indicators: **base practice (BP)** and **work product (WP)** indicators as identified in Figure 5. Process performance indicators relate to individual processes defined in the process dimension of the process assessment model and are chosen to explicitly address the achievement of the defined process outcomes.

Evidence of performance of the base practices and the presence of work products with their expected characteristics provide objective evidence of the achievement of the process outcomes.

A base practice is an activity that addresses the purpose of a particular process. Consistently performing the base practices associated with a process helps to consistently achieve the process purpose. A coherent set of base practices is associated with each process in the process dimension. The base practices are described at an abstract level, identifying "what" should be done without specifying "how." Implementing the base practices of a process should achieve the basic outcomes that reflect the process purpose. Base practices represent only the first step in building process capability, but they represent the unique, functional activities of the process, even if that performance is not systematic.

The performance of a process requires work products that are identifiable and usable in achieving the purpose of the process. In this ITES-BPO assessment model, each work product has a defined set of example characteristics that can be used when reviewing the work product to assess the effective performance of a process. Work product characteristics can also be used to identify the corresponding work product that is used or produced by the organization being assessed.

Clause 5 contains a complete description of the processes, including the base practices and the associated work products. Annex B described work product characteristics, with B.2 containing a list of generic work products and their characteristics and B.3 containing a list of process-specific work products, with the generic work products for completeness, and their characteristics.

Similar to the concept of modularity in object orientation, the shared characteristics of a group of work products have been extracted into a generic work product. An assessor should refer to both the specific work product and the generic work product in the PAM in the context of the actual specific work product when performing an assessment.

3.4 Measuring process capability

The process performance and process capability indicators in this ITES-BPO model give examples of evidence that an assessor might obtain, or observe, in the performance of an assessment. The evidence obtained in the assessment can be mapped onto the set of indicators to enable correlation between the implemented process and the processes defined in this assessment model.

These indicators provide guidance for assessors in accumulating the necessary objective evidence to support judgments of capability. They are not intended to be regarded as a mandatory set of checklists to be followed.

An indicator is defined as an objective characteristic of a base practice or work product that supports the judgment of the performance or capability of an implemented process. The assessment indicators and their relationship to process performance and process capability are shown in Figure 6.