



Arbeitskreis  
Assessment  
Center e.V.

# AC STANDARDS

## GERMAN STANDARDS FOR ASSESSMENT CENTER OPERATIONS

3<sup>rd</sup> completely revised version 2016

English translation V1.0

Form of citation:

Arbeitskreis Assessment Center e.V.  
(2016). *German standards for  
assessment center operations.*  
*English translation of version 3.0*  
<http://standards.arbeitskreis-ac.de>

**ARBEITSKREIS  
ASSESSMENT CENTER e.V.**  
Forum für Personalauswahl  
und -entwicklung

## INTRODUCTION

The “Arbeitskreis Assessment Center e.V. – Forum fuer Personalauswahl und –entwicklung” (working group assessment center – professional forum for personnel selection and development) – is an association of presently approx. 100 specialists in the fields of commercial and service enterprises, science, and public administration. Since the non-profit organization’s foundation in 1977, its focus has been the exchange of results and experiences between science and practice in the field of personnel assessment and development. In this process, the major objective is to optimize methods, scrutinize established procedures, and simplify practical applications.

## OBJECTIVES OF THE ARBEITSKREIS ASSESSMENT CENTER E.V.

- Elaborate on and improve the methods of qualitative HR work, particularly those of personnel selection and development. This includes the development of quality standards for assessment centers (AC), systematic personnel development, and the optimization and systematization of instruments of personnel selection and development.
- Exchange of experiences gained while developing and executing assessment centers and personnel development measures.
- Develop and discuss overall personnel development concepts.

## THE STANDARDS FOR ASSESSMENT CENTER OPERATIONS

The quality standards for assessment center operations were first elaborated in 1992 and thus were one of the first compilations of quality criteria for personnel assessment procedures in Germany. The AC standards aim to:

- Provide a modern basis for proper AC practice.
- Evaluate the quality of offers for company practice and thus to be able to recognize unqualified offers.
- Allow transparency and clarity for decision makers and users/practitioners.
- Further improve the acceptance of the assessment center method.

The first revision of the AC standards made by a task force of the Arbeitskreis Assessment Center e.V. was completed in 2004. This revision incorporated additional developments of the findings from science and practice. The present, updated version is the result of another revision which was published in 2016.

## MAIN CHANGES OF THE THIRD VERSION 2016

- Greater emphasis placed on the core idea of method variety (behavior simulation plus interview plus test/questionnaire).
- Options and developments offered by digitalization taken into account.
- All roles/persons relevant for the AC process taken into account (person responsible for procedures, moderators, test supervisors, role players, interviewers, assessors).
- More practical benefit as a result of a considerable extension of the method recommendations and examples of possible violations of standards.
- Much more specific qualitative minimum standards in the AC, e.g. with regard to the number and variation of procedure elements, the structuring of behavioral observations, and interviews.

The copyright for these standards is held by the Arbeitskreis Assessment Center e.V.

### **Members of the Working Group**

Niklas Becker, Reinhard Diesner, Dr. Dieter Hasselmann, Prof. Dr. Stefan Hoefl, Iris Hotfilter; Prof. Dr. Christof Obermann and Dr. Anett Prena

## DEFINITION OF ASSESSMENT CENTER

An assessment center (AC) is a testing procedure for measuring the potential and aptitude during the process of personnel selection or development in which several methods are combined and the participants are observed and assessed by multiple assessors.

The prime feature of every AC is the combination of different assessment methods to support diagnostic decisions. Three kinds of methods are particularly differentiated in the present standards: Behavior simulations (e.g. group tasks, presentations, or role playing), job-related tests and questionnaires based on test theory and job-related requirements, and interviews. Using simulations as a specific characteristic of the AC approach (**simulation principle**) must be emphasized in particular. These simulations allow direct access to complex, job-related behavioral competences.

Through the employment of several individual – methodically different – procedures, the AC makes it possible to control for procedure-specific limits and faults. The (optimized) combination of various aptitude testing approaches is thus essential for maximum accuracy in potential and aptitude assessments (**principle of using multiple methods**).

Another central feature of every AC is the **multiple assessor principle**: i.e. several observers and assessors who have highly diverse professional and biographic backgrounds observe and assess the participants. Since the one perfect observer or assessor does not exist, the combination of several independent assessments form another prerequisite for the optimum accuracy of potential and aptitude assessments.

## STRUCTURE OF THE STANDARDS

All in all, the current version includes ten individual standards which are formally based on the processes of AC construction and implementation in practice. Initially, every individual standard is followed by a distinctive description. The specific benefits of the standard contents are then described and their relevance explained. This is followed by recommendations for the practical implementation of the standard. Finally, typical practical procedures that violate the respective standard are described under the heading “Violations”.

## THE STANDARDS

<b>Standard 1</b>	Clarification of Objectives and Integration
<b>Standard 2</b>	Specification of a Requirement Profile
<b>Standard 3</b>	Procedure Selection and Development
<b>Standard 4</b>	Selection and Preparation of the Persons Involved in the Execution
<b>Standard 5</b>	Preselection and Preparation of the Participants
<b>Standard 6</b>	Preparation and Execution of the Procedure
<b>Standard 7</b>	Data Collection and Assessment
<b>Standard 8</b>	Data Integration and Determination of Results
<b>Standard 9</b>	Feedback and Follow-up Measures
<b>Standard 10</b>	Evaluation
<b>Glossary</b>	Elaboration of Important Terms

## 1. CLARIFICATION OF OBJECTIVES AND INTEGRATION

**Before developing and implementing an AC, the objectives and the general conditions, as well as consequences for the participants and other stakeholders have to be bindingly determined and communicated.**

### RELEVANCE

A significant benefit is reached – for clients and participants – by determining the objectives, general conditions and consequences in the scope of the development of an AC. It is vital to identify the relevant stakeholders and to integrate them into the process of determining the objectives and conditions in addition to the development process. This and the comprehensive analysis of and consideration of the AC context (e.g. merger of two companies), can increase the acceptance of the measure and enable a degree of implementation adequate to the situation. By taking into consideration the interconnected relationships with existing instruments (e.g. existing competency models), the integration of the AC into existing processes and HR work is ensured. A high level of transparency during the communication of the agreements furthers the constructive approach of all relevant persons in achieving the results and enables a high acceptance of the AC.

### IMPLEMENTATION

- The objectives or envisaged benefits for the organization (e.g. concrete recruitment, establishing a central pool of potential candidates, selection of participants for personnel development programs, retention of important staff members) are determined in advance.
- The clarification of the task occurs with the relevant stakeholders and with the involvement of co-determination boards (e.g. works councils) at an early stage. The context of the AC (e.g. restructuring, planned job cuts) is disclosed and included in the considerations.
- An accountable person, responsible for the procedures and who controls all relevant processes, is appointed for the planning, implementation and further supervision.
- The roles and responsibilities of the persons involved (e.g. clients, assessors, superiors, personnel managers) in the overall process and in the actual AC are defined clearly.
- The necessary general data such as objectives, resources, budget, the use of computer-based or internet-supported procedures, and the time horizon of introduction is agreed upon in a timely manner.
- Decided upon instruments for nomination are defined (e.g. personnel conferences, self-nomination, application documents).
- Development modules or program steps that follow the completion of the AC are planned in advance; ideally they are useful components of a holistic personnel development strategy. The interlocking with other modules is reviewed and included in the considerations (e.g. integration of the measures in an existing competence management and career planning system).
- The process in which the AC is embedded is openly communicated to all stakeholders in advance. This includes, in particular, a clear statement of what the consequences for the participants are and how the results are to be used and interpreted.
- The entire process is documented and/or visualized in adequate detail and can be issued to all persons involved for evaluation.

### VIOLATIONS

- The objectives of an AC are not made transparent. An AC is designated, for instance, as a development center although the assessments made have job consequences for the participant.
- An AC is developed and implemented spontaneously. The task is clarified only rudimentarily or not at all.
- An AC is conducted although it is not the optimum instrument (e.g. if certain specific technical knowledge is to be tested).
- The roles of individual persons involved in the overall process are unclear or relevant stakeholders are not integrated into the process. For instance, the role of a superior has not been clarified or a predetermined body with ultimate decision-making power (e.g. management board) which is not made transparent to participants.
- Conflicts involving objectives, framework conditions, or the design of the procedures are not (or insufficiently) dealt with or conveyed in the process of the development and preparation of the AC introduction. A reliable commitment involving all of the decisive stakeholders could not be reached.
- No or insufficient information is given on the objectives, design, and interlinking of the AC in the course of the introduction into the organization.
- All process steps are delegated to an internal or external consultant without a commitment of the organization to implement the results.

## 2. SPECIFICATION OF A REQUIREMENT PROFILE

**A valid aptitude assessment can only reasonably be constructed with a precise analysis of the concrete requirements.**

### RELEVANCE

The degree of matching between the person and his occupational activities is assessed in the AC. Therefore, prior to personalized diagnostics, an analysis of the tasks and requirements related to the target function must be performed. The result of this analysis is a requirement profile that summarizes the result-sensitive aspects of the job. This collected, detailed information describes the target function and is the essential basis for the subsequent steps in the AC construction process.

### IMPLEMENTATION

- The point of reference for the analysis is a predefined target function, specific to the organization.
- The tasks and requirements analysis is necessary to specify aptitude-relevant work situations as well as to identify the characteristics required for successful work (knowledge, skills, capabilities, and others).
- In order to cover all relevant aspects, the analysis is based on a thorough selection of analytical methods (e.g. workshops, interviews or organization surveys), with varied concepts of approach and perspective (common analyses are based on result, activity, behavior, and characteristics).
- Groups of persons involved can determine the existing requirement level (e.g. selected job holders) or define norms for the required target level (superiors, HR decision makers, etc.).
- Depending on the AC objective and the associated future orientation (selection, potential analysis, personnel development), the definition of the requirements is either more specific and task-related (selection) or more global and person-related (potential analysis and personnel development). Current and future requirements of the target function which can be anticipated in advance are taken into consideration.
- Defined competency models which are used throughout the organization are reviewed with regard to their applicability for the target function and made more specific to the individual job.
- General potential indicators which are relevant across jobs (e.g. cognitive skills, personality features) are taken into consideration by default.
- The requirements collected in the profile are described with operationalization specification and with suitable behavior examples.
- The derived job requirements must be homogeneous and one-dimensional, if possible. They exhibit only slight overlapping on the behavioral level.

### VIOLATIONS

- A specific task and requirements analysis is not performed. The existing requirements of other target groups are applied without further validation, or the existing requirement catalogs (or general skill lists) of other organizations or consultant agencies are used without checking for validity.
- Exclusive use of methods which favor certain aptitude testing approaches (e.g. only behavior-related analyses which serve as the basis for simulations, or analyses which refer only to characteristics and are used for selecting test procedures).
- Unilateral collection of requirements that are related only to the past, without reflecting on the effects of future changes.
- Unilateral collection of requirements that are related only to the future ("visions of the top-level decision makers") where the everyday requirements of the target function are insufficiently taken into account.
- Collection of general characteristics ("headlines") without sufficient specification of the concrete contents.
- Few selective requirements are chosen for determining the requirement profiles (e.g. "cooperation" along with "empathy") or different behavior aspects are combined under one header (e.g. "customer orientation and salesmanship skills").

### 3. PROCEDURE SELECTION AND DEVELOPMENT

**An AC is a combination of three procedure elements optimized for the respective aptitude testing issue: of these procedural elements at least one must be a behavior simulation and at least one must be a procedural element based on another methodological approach, e.g. a test procedure.**

#### RELEVANCE

The selection and design of the applied individual diagnostic procedures are oriented to the results of the task and requirements analysis. A special feature of the AC is the use of simulations. By using as many varying procedural elements with different methodological approaches as possible (interviews, tests and questionnaires based on test theory, biographic questionnaires, etc. apart from simulations), the weaknesses of the individual aptitude testing procedures can be compensated for and their advantages can be combined. The relevance of the requirements and the relative knowledge gain of the procedural elements are the deciding criteria for their combination.

#### IMPLEMENTATION

- In a requirements-and-procedure matrix, which requirement is recorded with which procedural elements is defined. Each job requirement is covered by at least two procedure elements. Here the goal is that they are to be based on different methodological approaches (simulation, interview, test, etc.).
- The AC contains as many procedural elements as possible (recommendation: 10); at least, however, three elements. They should be based on different methodological approaches and be comprised of at least one behavioral simulation, one interview, and one test or questionnaire procedure based on fundamental test theory.
- For behavioral simulations (e.g. role play) written role playing instructions are provided which address every requirement explicitly several times (concept of “trait activation”) and which contain behavior descriptions and statements which have to be exhibited by each participant.
- All newly developed procedure elements are practically checked for suitability in trial runs with appropriate persons before they are actually implemented in an AC. Aspects of the review are, among other things, whether or not an average level of difficulty is reached, if all requirements (according to the Trait Activation concept) can be measured multiple times, and if a high degree of assessor/assessment consensus is achieved.
- For those case studies which are not assessed in the framework of behavioral observation, an organization assessment scheme must be developed analogously to the test development, and assessment objectivity must be proven in trial runs.
- Procedural elements which are to be implemented in several different languages or cultural contexts must be examined in trial runs to test for their suitability as applied to each language or culture.
- Interviews should be structured to the greatest extent possible. Elements of this structure are, among other things, the questions and content (which have been determined in advance and which are the same for all participants), the questioning systematic, the content relevance of the questions for the individual requirements, the determination of valuation levels for possible answers (e.g. through example answers), and previously specified rules for aggregation of the individual answers to establish a requirement assessment (see AkAC interview standards).
- The quality (reliability, validity) of the applied tests and of the psychological questionnaires has been sufficiently proven for the application situation and meets the requirements of DIN 33430. The questions are shaped by their relevance for the requirements and their application is justified by the information gained by utilizing them. Questions which intrude upon personal privacy are not allowed.

#### VIOLATIONS

- An AC which consists only of online procedures, test procedures, interviews, or simulations (the single-method approach), or only of procedures with a closed answer format evaluated without assessors, e.g. online.
- The overemphasis on certain procedural elements for economic reasons (e.g. only behavior simulations such as group discussions, presentations), by virtue of practicability, or simply “because it is common”, without derivation from the requirements.

- Job requirements are recorded in simulations although they cannot sufficiently be observed in the exercise and in the context of Trait Activation (e.g. observation of “learning aptitude” in a group discussion).

### 4. SELECTION AND PREPARATION OF THE PERSONS INVOLVED IN THE IMPLEMENTATION

**Only properly prepared persons involved in the process, who represent the organization adequately, ensure sound and exact aptitude assessments.**

#### RELEVANCE

A valid aptitude assessment is made possible by the professional acting of all persons involved in the AC process (persons responsible for the AC procedures, moderators, test supervisors, role players, interviewers, assessors). This is ensured by the selection of competent and motivated persons who are trained comprehensively and who act in accordance with their roles.

#### IMPLEMENTATION

- Persons who are responsible for the AC possess the necessary qualifications to comply with the quality standards in the design process. Moderators are qualified to steer – as well as to interfere in – the diagnostic process if the quality of the aptitude assessment is at risk.
- Qualified test supervisors are prepared for the specification and evaluation of the test procedures used in compliance with the specified instructions.
- Prior to their first real assignment, role players undergo a behavior-modelling training in which they are made familiar with the assignment scenarios as well as the acting instructions and scripts. The aim is standardized acting in the context of the role instruction, which allows all participants equal freedom to act. Regular feedback and reflection ensure consistent performance over time.
- Interviewers train conversational techniques based on the specified guidelines. The recording and evaluation of the information collected in the interviews is taught by using examples and by applying basic principles of assessor training.
- In the formation of the assessor group it is important to ensure sufficient objectivity and neutrality (e.g. no hierarchical relationships among the assessors). The persons involved are to represent the organization adequately and related to organization experience, technical background, and perspective regarding the target function. Assessors of the various departments of the organization should be positioned at least one level above the target function. External consultants can supplement the assessor teams, depending on corporate policy and need. When inexperienced assessors are to be integrated, a good mix of experienced and new assessors in the group of assessors must be assured.
- Prior to his initial assignment, every assessor undergoes a training that is based – regarding length and contents – on common and proven training concepts for behavioral observation and assessment. This includes, in particular, the comparison of personal assessment with expert and reference assessments for the consolidation of a reference framework for personal assessment. Experience has shown that job shadowing in the AC prior to the first assignment as a person participating in the procedure eases the induction phase.
- Regular feedback for all persons involved in the process on their behavior or their performance has a quality-ensuring effect. Follow-up training is required in the case of fundamental changes to the AC's content, new target groups, or prolonged periods of non-participation.

#### VIOLATIONS

- Persons without sufficient qualification or preparation are participating in the process.
- Assessors or other process participants fulfil their roles without motivation, e.g. due to involuntary participation (“participation due to service obligation”).
- Assessors and interviewers do not have any real insight into the target function to be filled (e.g. clerks selecting junior managers).
- Process participants only take part in an initial, compacted training at the start of their activity (“free-ride ticket with pressurized fueling”) and after that continue working for years without any feedback on their behavior or performance.

- In regard to procedures for potential analysis: the assessor or interviewer is the direct superior of the participant.



## 5. PRESELECTION AND PREPARATION OF THE PARTICIPANTS

**Systematic preselection and realistic advance information on the AC are fundamental for a high hit rate and for acceptance.**

### RELEVANCE

If a systematic participant nomination and preselection process is performed prior to the AC, the hit rate and thus the probability that the participants selected in the AC with positive results will actually be successful in practice is increased.

If the participants receive honest and realistic initial information about the target function or level and about the AC method to be used, the recommendation quality for selection or filling the function is increased through self-selection. At the same time, the acceptance of the procedure is increased among the (potential) target group due to the transparent approach.

### IMPLEMENTATION

- In principle, all procedures with proven aptitude testing validity, e.g. biographic data, test procedures (online or paper-based), or pre-interviews, can be used as preselection procedures.
- A process for dealing with the self-nomination of internal participants must be established and communicated within the organization.
- As many generally suitable participants per target function as possible should be invited to participate in an AC with the objective of selection or potential determination, to increase the number of hits of the overall procedure.
- For advanced informing of the (potential) participants, it is recommended that a realistic job description is made available, to increase the probability of successful participation through self-selection.
- ACs with the objective of selection or identification of potential are ideally performed without detailed preparation of the participants so that the performance spectrum is not restricted in advance artificially. The preparation must be made uniformly without the rehearsal of behavior patterns or the detailed introduction of procedure elements.
- The participant's necessary advance information also comprises the disclosure of the objective and/or the character of the procedure. In particular, it must be made clear to the potential participants whether the procedure serves selection, potential analysis, or personnel development purposes and what consequences the results will have.
- Obligatory minimum elements of advance information are also: relevance of the AC for the further process of selection or potential determination, involved assessors or other representatives of the organization, type of procedural elements, possibility and form of feedback, reports and their retention.

### VIOLATIONS

- No or false information about the objective (e.g. selection AC instead of development AC) or about the opportunities and risks of participation (e.g. impacts of the AC result on career development) is communicated to potential participants.
- Improper preselection or advance information is the reason for low success rates and for frustration among participants with no chances. Excessive preparation results in an artificially restricted performance bandwidth.
- Selection AC with only one participant (individual assessment) in which it has been decided in advance that he will be given the job.
- The nomination by the superior does not follow the specified criteria or is influenced by other motives (e.g. getting rid of unwelcome employees by means of flattery, intentional non-nomination of particularly capable employees, nomination of the best-skilled employees for executive positions, etc.).

## 6. PREPARATION AND EXECUTION OF THE PROCEDURE

**Proper preparation and moderation of the procedure ensure a transparent and target-aimed process.**

### RELEVANCE

The AC is a complex and dynamic process whose procedures must be regulated clearly and transparently. A responsible moderator and suitable organizational tools as well as compliance with procedural and behavioral rules ensure smooth running. When the procedure elements have been selected, thorough planning and professional execution are the basis for the acceptance and the significance of an AC.

### IMPLEMENTATION

- To ensure that the process runs smoothly and undisturbed, all framework conditions (scheduling, invitations, rooms, equipment, etc.) must be clarified and settled in a timely manner.
- If computer or internet based components are to be used, clear rules must be defined (e.g. type of authentication, supervision of execution, ensuring consistent execution conditions, support rendered for technical questions).
- A differentiated and clear time schedule informs all persons involved which procedure elements will take place when, with whom (participants and assessors), and where. Sufficient and realistic amounts of time have been planned for all procedure steps.
- Assignment plans define clearly which requirements are measured with which procedure elements (requirement-and-task matrix) and which participants will be assessed by which assessors or interviewers (observational rotation plan).
- Each assessor observes each participant at least once over a comparable amount of observation time.
- Preparation and moderation must be planned so that equal conditions exist for all participants (e.g. same sequence of procedural elements, similar waiting times, same conditions for using equipment).
- A moderator is responsible for the quality of the observation and the assessment process, for instance, by providing feedback to the assessors so that they comply with all agreed rules (see also Standard 7).
- The person responsible for the procedure makes sure by means of appropriate review and/or together with the moderator that the measures described in Standard 4 "Selection and Preparation of Persons Involved in the Execution" are implemented.
- The procedure is protected against undesired disclosure of information, e.g. by collecting the exercise papers at the end of each exercise and by binding all persons involved to secrecy.

### VIOLATIONS

- Due to planning mistakes or unprofessional execution, fair and objective procedures cannot be guaranteed for individual participants or for the whole assessment as a whole.
- The moderator takes on only organizational tasks but does not control the quality of the observation and assessment process.
- Overload of all persons involved due to time, psychological, or physical pressure (e.g. by non-observance of the legal working hours code, assessor conferences extended into the evening hours).
- No time planned for necessary analyses and assessment after every exercise.
- There is an informal exchange about the participants between the procedural elements and/or other points are used for assessment which do not belong to the agreed elements.
- Unprepared or untrained assessors make assessments (e.g. persons who are responsible for the organizational management of the procedure).

## 7. DATA COLLECTION AND ASSESSMENT

**Data collection and assessment as part of behavioral observations, interviews, and test or questionnaire procedures are important steps in the production of reliable aptitude statements.**

### RELEVANCE

The systematic observation of participant behavior in work simulations, interviews, and the use of tests and questionnaires are the key sources of data for potential analysis and aptitude assessment in an AC. The collection of aptitude findings with these methods, however, is potentially prone to errors. In order to ensure reliable and valid results, an observation, recording and assessment system is required that is requirement-related and rules-based.

### IMPLEMENTATION

- A documented observation, recording, and evaluation system regulates the contents of behavioral observation as well as data collection and recording (e.g. interview sheets), the allocation to the assessment criteria, and the process of the assessment or evaluation (e.g. the relevant standard group and scale in tests).
- The general job requirements of the AC are separately operationalized for every procedural element. This deciphers for the assessors which performance or behavior must be shown by the participants during which respective procedural element.
- The actions of the participants in the behavior simulations and in the interview are recorded and assessed independently of each other by at least two assessors or interviewers who have been trained for this task and have specifically prepared for the respective procedure, exercise, and assessment system. The quality of assessment of the behavior in group tasks should not be impaired by the participation and observation of too many candidates (max. 5-6, ideally 2-3).
- The assessors and interviewers record important observations and the statements and/or answers and provide an independently written assessment using the assessment criteria immediately after the behavior simulation or interview.
- In order to avoid quality losses and assessment mistakes due to overload or complexity, three (but not more than five) job requirements are to be observed per work simulation.
- For work simulations, the job requirements are translated into observable behavior, and the performance is described in concrete terms (in the form of behavior-anchored operationalization) on the varied scale or evaluation levels, which take into account both the intensity and frequency of the behavior.
- The respective characteristic value is assessed in the interview evaluation with regards to the defined questions (complexes) with the help of previously established typical answers.
- Tests and questionnaires are evaluated based on compatible reference standards or other evaluation schemes that have been validated empirically for the target group, case studies are evaluated with the help of standardized (and also norm-based, if possible) solutions by instructed assessors or test supervisors. Taken into account are only those aspects which are relevant for the respective requirement (e.g. subtests).

### VIOLATIONS

- A documented and regulated observation, recording, and evaluation system does not exist or it is not defined precisely enough, and/or its applicability has not been checked in advance.
- Assessment systems (e.g. from external service providers) are adopted without checking the applicability to the respective procedure in advance.
- The definition or description of the assessment criteria is made only in a general form and is not operationalized with regard to the content of the individual behavior simulations.
- For interviews, there is no catalogue of questions and/or specification as to which answers will result in which assessment.
- Ad-hoc questions that are developed during the interview contribute in an unstructured way to the evaluation or influence the assessment as a whole.
- The assessment is not based on the particular defined behavior, trait manifestations, and the required level but rather only on the relative comparison with other participants (relative assessment).

## GERMAN STANDARDS FOR ASSESSMENT CENTER OPERATIONS

- Tests and questionnaire methods are used based on inappropriate normative group data, and case studies are utilized with no previously verified standardized and norm-based solutions.

## 8. DATA INTEGRATION AND DETERMINATION OF RESULTS

**The results of the procedural elements and assessments are integrated in the context of a previously defined and regulated process.**

### RELEVANCE

A large number of individual results is collected for every participant during the course of an AC, which may take very different forms. It is decisive for the usefulness of the procedure that the resulting statements about the level to which the participants meet the job requirements (e.g. in the sense of profiles of strengths and weaknesses) or the respective aptitude testing results, are integrated. The various results (such as qualitative behavior descriptions, ratings, or test results) can only be reasonably weighted and integrated with the help of a clearly defined, rules-based process.

### IMPLEMENTATION

- A defined and regulated process of data integration and determination of results is a fundamental precondition to obtaining reliable results from an AC. The specific design depends, among other things, on the objective of the AC (support and personnel development or selection or promotional decision).
- In practice, neither a quantitative-statistical evaluation nor a qualitative evaluation has proven generally superior; the former is apparently more efficient for mere decision making, e.g. for personnel selection, whereas the latter usually supports feedback in the context of personnel development.
- The data integration takes place in a way clearly defined before the AC and that is consistently applied to all participants, where the rules governing decisions, such as weight of individual characteristics, minimum levels and/or criteria for success, or the procedures in cases of doubt, have been clearly defined.
- The integration of the various individual results to obtain an overall assessment rating and to make a decision, if necessary, must be carried out promptly after the tasks.
- Immediately after the observation and independent assessment of a behavior simulation, the individual assessors can perform an initial plausibility check and compare their results to prepare for data integration (in the sense of a – in ideal circumstances – moderated mini assessor conference) to avoid differences that later have to be discussed in the final assessor conference.
- An assessor conference is a central element of data integration and the establishing of results. This conference provides the possibilities to check the plausibility of results, address deviations, discuss uncertainties, make decisions and proposals for supportive measures while also giving development recommendations and to elaborate “strength or weaknesses statements” for the feedback.
- A strict application of the defined data integration and result determination process (without regulation exceptions, for instance) should ensure optimum results.

### VIOLATIONS

- No or inconsistently applied previously defined, regulated process of data integration and result determination or agreed decision making rules (e.g. for “passing”).
- The regulated process of data integration and result determination is circumvented or suspended by deliberate influence (e.g. by hierarchically, higher-level assessors) or spontaneous rule changes enacted by the committee of assessors.
- Use of observations or information gathered outside of the defined procedures or use of (non-verifiable) psychological behavior explanations to qualify results.
- Assessors informally exchange information about particular participants between the individual behavior simulations with potential overall assessments being made prematurely.
- Participants are not treated equally, for instance, the first participants are discussed in detail in the assessor conference whereas decisions are made hastily and without sufficient discussion toward the end.
- An assessor conference is conducted without efficient moderation that ensures compliance with the rules for result determination.

## 9. FEEDBACK AND FOLLOW-UP MEASURES

**Every AC participant has the right to receive individual feedback in order to be able to understand the results and to be able to learn from them. After the AC, concrete follow-up measures must be defined and implementation must be checked regularly.**

### RELEVANCE

A structured and respectful feedback conveys learning incentives and promotes the transparency as well as the acceptance of the AC and, thus, of the HR work. Even in the case of negative feedback, a positive personnel marketing function and acceptance of the AC results can be elicited among the participants. In the sense of a maximization of benefits, an AC should generally be connected to existing personnel marketing and personnel development systems, serve as a foundation for subsequent development measures, and support the target function in establishing itself. After the feedback is given, concrete follow-up measures are taken, the implementation of which is checked at regular intervals.

### IMPLEMENTATION

- After an AC, the candidates are offered feedback in a personal consultation and in a timely manner. This feedback is given to the participants on a voluntary basis.
- The feedback is solely based on the observations and results of the implemented procedural elements of the AC and on the assessments, recommendations, and the decisions of the assessor conference.
- Essential elements are – especially in the case of development procedures – personal strengths and weaknesses related to the job requirements. In the case of a selection AC, recommendations should also be given for the candidate's establishment themselves in the target function; for external candidates recommendations (advice) on how to integrate into the organization and its culture.
- The feedback is communicated by referring to the recorded requirements and is based on concrete observations and direct quotes. Transparency of information is provided in terms of how assessments have been derived from these observations and quotes.
- The written summary of the AC findings – and thus the binding feedback foundation must be issued or made accessible to internal candidates.
- If the procedure serves personnel development, a proposal for a development and measures plan is drawn up and discussed with the participant. It will be implemented in cooperation with the superior and the HR department.
- A measures plan is set up and agreed to with the participant. All measures are based on the present and future requirements of the target function and they are derived from the strengths and weaknesses identified in the AC. When the tasks or job requirements of the target function are changed, the follow-up measures will be adapted in a timely manner.
- As a rule, the entire range of suitable development tools should be used in the follow-up: Accompanying specialist and mainly further interdisciplinary training programs as well as on-the-job training measures. The latter have the advantage that feedback processes can follow these directly.

### VIOLATIONS

- None or only a few participants of the AC are given feedback, for instance because the effort is spared, due to general reservations, or apprehensions based on legal grounds.
- Confidentiality and data protection are not observed by all persons involved.
- The feedback is given under time pressure and without the possibility of asking questions, etc.
- The feedback is based on general statements ("you lack social competence") or it relates to information that has nothing to do with the AC ("I heard last week already that you always ...").
- The assessors did not prepare any quotes or observations they can use as argumentation for their assessment.
- Assessors do not take any responsibility for their feedback by having other persons (e.g. moderators) give the feedback or by avoiding "I" or "we" messages.
- Follow-up measures are neither planned nor implemented or documented only insufficiently.
- After a negative AC feedback, the follow-up measures serve only as a "consolation" for internal participants, and they are not embedded in a development concept.

## 10. EVALUATION

**Regular testing and quality control ensure the benefit of the procedure and that the objectives are sustainably achieved.**

### RELEVANCE

The significance of an AC can only be substantiated on the basis of systematic evaluation. Therefore, when a new AC is developed, expert tests should ensure that standards applicable to its construction and current scientific findings are considered. With the help of trial runs or pilot implementations, the AC should be checked for whether central requirements for designing the procedure elements (in particular simulations as well as observation and assessment scales) have been implemented effectively. In addition, the applied AC procedure and the conclusions derived from the results should be evaluated comprehensively and empirically, in particular if the procedure is repeated frequently or the number of participants is high.

### IMPLEMENTATION

- As a general rule, when a new AC is developed – or the AC is adapted to a new target group or other considerable changes are made – it should be ensured by expert tests (central structural characteristics) that the procedure design does not show any deficiencies.
- If an AC is developed for use with larger numbers of participants or for repeated execution, this test should also be conducted in the context of trial runs of that AC.
- The object of quality control is, in particular, sufficient behavior activation or observability of the characteristics to be measured in the simulations, an adequate level of difficulty of the procedural elements and behavior anchors, and a unique and applicable definition or operationalization of the assessment criteria.
- After each AC, routine evaluations should be carried out relating to procedure execution (e.g. the functioning of the time table and trait activation or the behavior of the various persons involved in the execution) and to its acceptance among the participants and assessors.
- If an existing procedure is used (without any changes) over a prolonged period and with a sufficiently high number of participants, a comprehensive empirical evaluation of the AC should also be carried out and repeated regularly every three to five years.
- The subjects of a comprehensive empirical evaluation are the accuracy and the predictive validity of statements regarding potential and aptitude and additionally, if possible, the accuracy of the recommended development or supportive measures.
- Besides the applicability of the AC results, structural characteristics of the procedure design should also be validated, e.g. the independence of the results of the different procedural elements and job requirements as well as their respective individual contribution to the overall result, the adequateness of the level of difficulty of the tasks and exercises, and the definitions of levels of the respective job requirements.
- Another element of quality control is related to the fairness and acceptance of the AC. To be examined: whether the procedure (systematically) disadvantages certain groups of participants (e.g. mixed groups of sales and back office) and whether the process design and the procedure results are accepted by participants, assessors, and other interested persons (e.g. management or staff council representatives).
- Last but not least, the contents and economic benefits of the AC are the subjects of a comprehensive evaluation where, with the help of applicable methods, economic aspects are to be checked with regard to the cost/benefit relation and secondary aspects (such as the impact on organization development) are also taken into consideration.

### VIOLATIONS

- Introduction and execution of a new AC without testing the central structural characteristics (see above) of the procedure.
- Instead of a comprehensive systematic quality check, a confirmation is made simply by utilizing the perceived acceptance of the procedure or positive individual feedback.
- Quality control is performed only by the person/institution who actually developed the AC.
- The selection of success criteria is mainly made under the consideration of easy data availability.
- Central criteria of quality such as predictive validity, fairness, and benefit, are not validated even if the procedure is applied over an extended period and higher participant numbers are used.

# GLOSSARY

- **Job requirements** (syn. observation characteristics or assessment criteria) - Term describing job requirements or personality traits or competencies used to answer aptitude testing questions.
- **Requirements-procedure matrix** (syn. requirements-exercise matrix) - Table establishing which assessment criteria and job requirement aspects are measured with which procedural elements. This overview also shows whether all assessment criteria are recorded by at least two procedural elements.
- **Assessment center** (AC) - An AC is an aptitude testing procedure using multiple methods for potential and aptitude assessments in personnel selection or development procedures. A central element of each AC is the use of simulations (e.g. group tasks, presentations, or role playing) in which several assessors determine aptitude in behavioral observations. These behavior simulations are supplemented by suitable occupation-related tests and questionnaires as well as aptitude diagnostic interviews.
- **Observer** (syn. assessor) - Line managers who are involved in the execution of an AC, or employees trained for aptitude testing and whose task is to observe and assess the participants' behavior in the situational procedural elements and to develop the overall result in the final assessor conference as well as to formulate development recommendations.
- **Assessor conference** - Moderated conference of the assessors in which the results of the different procedural elements (which may, by then, be available in a quantitatively aggregated form) are reviewed, checked for plausibility, scrutinized for deviations of individual results, and cases of doubt are discussed and decisions are made or recommendations are given. In addition – if required – the “strengths and weaknesses” relevant for feedback and development measures are established. (In contrast, see also the definition for mini assessor conference.)
- **Observational rotation plan** - Overview in which the assignment of the assessors to individual candidates is outlined for the various procedural elements.
- **Base and ceiling effects** - When procedural elements are designed (behavior simulations in particular) and observation and assessment scales are defined, it must be ensured that the measured criteria and requirement aspects are not only correct with regard to their content but that they are also constructed with a suitable level of difficulty. Otherwise, base effects (too easy - virtually all candidates fulfil the requirements) or ceiling effects (too difficult - candidates usually cannot fulfil the requirements) occur. In both cases it is not possible to differentiate the results in a meaningful way.
- **Cut-off value** - Degree of individual competences exhibited or criteria fulfilled as of which an AC participant has passed.
- **Development center** - A development center is a variant of the AC in which the potential and aptitude analysis does not serve the preparation of personnel (selection) decisions but instead serve the purposes of personnel development. The support and development of the participants is the focus; in addition, for instance, intermediate feedback is used frequently after exercises to enable learning and development incentives.
- **DIN 33430** – German industrial norm that describes quality criteria and standards (in particular for documentation) for occupation-related aptitude testing and additionally defines requirements for measurement-theoretical questionnaires and tests.
- **Aptitude testing** - Measuring and assessing the aptitude of a candidate with the aim of predicting the probability of the successful fulfilment of a specific activity or task.
- **One-dimensional job requirements** - To obtain reliable results, it should be ensured that the considered job requirements are formulated independent of each other, i.e. their definition should be restricted to one (individual) aspect (e.g. not: “power of persuasion and assertiveness”).
- **Evaluation** - Validation and assessment of the usability of the AC for answering the respective questions relating to aptitude testing.
- **Fairness** - A central aspect of fairness regarding the execution and results of an AC is the whether all candidates are given equal conditions regardless of age, sex, nationality, or religion and thus have equal chances for obtaining a certain result, unless this is prevented by objective requirements (as, for instance, necessary experience on the job).
- **Case study** - Group of procedural elements in which a task-relevant situation or problem is to be analyzed and for which the suitable procedures must be developed; an evaluation will then be made either in the course of a behavioral observation (the solution presentation) or with the help of a standardized evaluation schema (incl. suitable standardization).
- **Questionnaire procedure** - Standardized, psychometric procedural element which usually measures personal statements on attributes of personality and complies with the requirements of DIN 33430 for “measurement-theoretical questionnaires and tests”.



- **Quality criteria** - The quality of aptitude testing procedures is assessed with the help of in the meantime widely accepted criteria. The quality criteria are differentiated between main quality criteria (objectivity, reliability, and validity) and secondary quality criteria (in particular benefit and economy, fairness and acceptance).
- **Interviewer** - An interviewer is a person who has been trained for aptitude testing and who conducts interviews.
- **Mini assessor conference** (syn. intermediate coordination) - Brief initial coordination of the assessors after every run of a participant in a behavior simulation or an interview with the aim of making an initial comparison of the observations and assessments in the context of fresh impressions. The coordination takes place after the observations have been independently recorded and evaluated.
- **Moderator** - Person responsible for the AC process who, among other things, instructs candidates and assessors of their individual tasks, moderates the assessor conference, and ensures the smooth systematic execution of the procedure as well as compliance with the procedure rules. A moderator thus establishes important conditions for meaningful results.
- **Objectivity** - The results of the AC are objective if they are independent of assessor and process influences.
- **Operationalization** - Determines in which way a (job requirement) characteristic (e.g. ability to deal with conflicts) is to be made observable and measurable. Besides the definition of the characteristic, a description of the manifestation of the various level degrees is important.
- **Potential analysis** - AC for employees of an organization which pursues the aim to determine the potential of these employees, mostly - but not necessarily - relating to management activities.
- **Quality of prognosis** - Measure of the validity of the AC to predict job aptitude and success criteria.
- **Quantitative evaluation** (syn. statistical evaluation) - The results of certain assessment criteria and additionally the overall result of the AC are determined on the basis of ratings and quantitative individual results, with the help of previously defined rules in the form of calculating (weighted) average values or cut-off values.
- **Qualitative evaluation** (syn. clinical evaluation) - The results of individual assessment criteria and the overall result of the AC are determined on the basis of qualitative individual results (e.g. observation notes) obtained during the course of an experience-based assessment process as well as on a content-based discussion of the assessors.
- **Reliability** - Reliability or accuracy of the acquisition of the aptitude criteria and job requirements which are evaluated in the AC (or generally in aptitude testing procedures). Worth questioning would be, for instance, whether the results would still be comparable if candidates participated repeatedly or other assessors were assigned.
- **Role player** - Specifically trained and prepared interaction partner for participants of an AC who acts in the within the defined role instructions and ensures that all candidates are given comparable communication requirements and reactions to confront.
- **Stakeholders** - Persons whose requirements and assessment relating to the execution of the AC are relevant within or outside the organization due to their positions as clients, decision makers, disseminators, opinion leaders, or representatives of interest groups.
- **Test supervisor** - Person trained for aptitude testing procedures who instructs and supervises the participants in test and self-assessment procedures and evaluates these procedures.
- **Participant** (depending on AC objective, syn. test person, candidate, applicant) - The person who is assessed in the AC.
- **Test procedure** - Standardized psychometric procedural element which measures, for example, certain performance or personality features and complies with the requirements of DIN 33430 for "measurement-theoretical questionnaires and tests".
- **Trait activation** – The expectation that an AC procedural element must be created with instructions for participants and role players so that the measured requirements (= traits) can be observed explicitly multiple times; e.g. for assessing the behavior in conflicts, the role player (employee) in a leadership role play should express his deviating opinion at several previously defined points which should be the same for all participants.
- **Validity** - Meaningfulness of the results of the AC (or generally of aptitude testing procedures), for instance, relating to the prognosis of occupational aptitude, development potential, and the assessment of the job requirements or criteria measured in the respective procedure (e.g. the successful fulfilment of a managerial task).
- **Behavioral simulation** (syn. work simulation, exercise) - Procedural element in which behavior is assessed by at least two assessors (e.g. role play, presentation, group discussion, case study, mailbox). Procedural

elements or methods in which the characteristics of a simulation can only be pursued in imagination (e.g. "what would you do if...") are not behavioral simulations. Additional, procedural elements in which written comments or answers to multiple-choice tasks are evaluated are not behavioral simulations. The execution and assessment of behavioral simulations can take place through IT support at a separate location ("remotely") or at another time ("asynchronously").

- **Procedural elements** (syn. exercises, tasks, modules) - Individual components that are combined to create an AC, e.g. role playing, group discussions, tests, case studies, interviews, and presentations.
- **Behavior-anchored operationalizations** - The job requirements and the different levels of the assessment scale used for a certain characteristic in the AC are defined in the form of concrete behavioral descriptions and/or examples.