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Human resource management — Workforce allocation

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National foreword

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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 ISO documents 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 of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 260, *Human resource management*.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

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Introduction

The allocation of work to workers is the one of the most fundamental management tasks and responsibilities in an organization. It has a profound impact on people, the organization's ability to deliver and financial outcomes.

The human resource (HR) function should have a significant role in promoting and driving balanced outcomes. Development and monitoring of an allocation framework and allocation policies, as well as compliance, are essential for good allocation practices to be applied by the organization.

Workforce allocation encompasses a broad range of processes, practices and management activities that address organizational performance, people management and compliance issues. These processes focus on a critical resource – people – and thus significantly influence the social climate and performance of an organization. Decisions resulting from these processes directly impact people's well-being, relationships, motivation and performance, and the organization's overall capability, output and collective intelligence.

Allocation occurs in many ways. Work can be directed by the organization or selected by the worker. Decisions can be made using human judgement or automated tools. Workers can be informed of when to attend shift work, what activity to complete in project work, what job to do, and be appointed to a position or be informed in other ways.

This document recommends good practices common to all types of allocation. It recommends an allocation framework, processes and steps, and explains how to prepare, assign and inform allocation decisions.

Allocation processes follow workforce planning processes that segment the workforce, calculate gaps and plan recruiting, training and transfers (see ISO 30409). Allocation processes generally cease at a level before workers self-manage their work, possibly including decisions on individual tasks. Workforce allocation is a subset of broader workforce management processes and interfaces with absence management and timekeeping processes. See Figure 1.

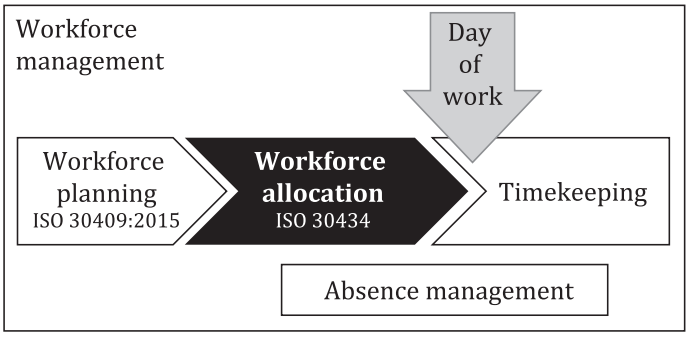

Figure 1 — Workforce management and allocation processes

Effective workforce allocation practices ensure the organization's work requirements are identified and allocated appropriately. The principles of effective workforce allocation are:

a) complying with state and organizational regulations, policies, rules and agreements;

b) ensuring zero harm to workers, whether physical or mental;

c) allocating work with equity and respect;

d) considering options for flexibility in work times and work formats;

e) enabling transparent and fair allocation decisions;

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f) communicating allocation decisions clearly and in a timely manner that enables workers to acknowledge work allocated to them.

Users of this document will include:

1) workforce professionals, including resource managers, workforce managers, workforce schedulers, roster coordinators, allocation coordinators, staffing coordinators, workforce coordinators and workforce analysts;

2) human resource managers;

3) frontline and executive managers;

4) workforce policy makers;

5) project managers and consultants involved in workforce systems and processes;

6) vendors of workforce technology;

7) trade union or employee representatives and employer groups.

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Human resource management — Workforce allocation

1 Scope

This document describes a framework of processes, practices and management activities for allocating work to workers. Its high-level principles and processes are applicable to all allocation methods and workforce types. It can be used in all types of organizations and industry sectors, and from small teams to large complex organizations. It applies to all workforce sourcing methods, whether the workforce is made up of internal employees or externally sourced workers.

This document also addresses the relationship between allocation decisions and stakeholders, including operations, finance, human resource functions and, most importantly, workers.

This document explains how to create an allocation framework, design an allocation process and document, communicate, measure and improve the process. It also suggests preventative actions to stop or mitigate undesirable outcomes.

This document does not address:

a) absence management or planning or timekeeping;

b) role or skill-based workforce planning (refer to ISO 30409);

c) labour standards;

d) training or succession planning;

e) recruitment (refer to ISO 30405 and ISO 30409);

f) compensation or performance reviews;

g) health and safety (refer to ISO 45001);

h) work ergonomics (refer to ISO 6385);

i) methods of organizing specific types of work (e.g. lean manufacturing, agile project management);

j) automation of tasks using “digital workers”, such as physical robots and artificial intelligence bots.

Annexes to this document describe details and foundational concepts of allocation applied in various industries as examples to support the theory.

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 30400, *Human resource management — Vocabulary*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 30400 and the following apply.

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

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

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

3.1
workforce allocation
process of preparing, assigning and informing *allocation decisions* (3.2), collecting the workers' responses and adjusting allocation

3.2
allocation decision
determination as to which worker(s) will be assigned to what work

3.3
allocation horizon
period prior to the commencement of work where an *allocation decision* (3.2) is made and/or workers and other stakeholders are meant to be informed of an allocation decision

3.4
allocation stage
series of preparation, assignment, inform and respond steps that are taken once or repeatedly around *allocation decisions* (3.2) related to a specific *allocation horizon* (3.3)

4 Workforce allocation

For the purposes of this document, allocation is the process of preparing, assigning and informing allocation decisions, collecting the workers' responses and adjusting allocation.

The act of assignment has four aspects:

a) matching workers and work;

b) validating that target outcomes can be achieved;

c) taking preventative action if needed;

d) accepting compromise.

Organizations should define target allocation outcomes so that assignment decisions can be validated. Validation can involve checking that work will be delivered, workers will be utilized and workload is reasonable, within target outcomes.

When target outcomes are forecast to not be achieved with the current assignment, then further alternative action or compromise is needed. Alternatively, compromise can be in the form of acceptance of under-delivery, low utilization or higher workloads.

Key to workforce allocation processes is the quantification of effort forecasts for each period. There are four forms of effort:

1) demand: the quantity of work that will need to be performed;

2) allocated work: the work allocated to workers for a specific period;

3) capacity: the total quantity of workers' availability;

4) worker availability: the time and duration for which an individual worker can undertake work.

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5 Understanding the organization

5.1 General

Before defining an allocation framework and processes, a clear understanding of the organization, workers, work, stakeholders, rules and policies should be established and documented. This understanding should include current processes and systems used in the organization.

Organizations can have workforces within workforces, each requiring potentially unique allocation processes. An organization can have multiple workforce allocation processes. In general, each could be based on a unique combination of work and worker characteristics (e.g. skills, competences, education, certifications and accreditations, and experience), management expectations and individual requirements. Key characteristics (and their attributes) should be identified and documented to a level that enables effective workforce allocation.

NOTE Segmentation, roles, capacity and productivity are inputs into the workforce allocation process. For workforce segmentation in the context of workforce planning, refer to ISO 30409.

5.2 Organization characteristics

Characteristics of the organization, relevant to allocation, should be identified in a way that considers:

1) the organization's values, vision, mission and strategy;

2) the organization's design and structure, including its governance and decision and delegation hierarchies (e.g. subsidiaries, regions or locations, markets, customers, products, service lines, disciplines, projects).

5.3 Work characteristics

Characteristics of work should be identified in a way that considers:

1) how work is defined and the granularity at which it is defined and allocated, for example project phase, task, shift, where, when, including if the work is done remotely (from home or off-site) and which roles (and skills) are needed for the work;

2) how demand is quantified, if at all, e.g. headcount, hours per task, full-time equivalent (FTE), story points.

The way work, roles and demand are described depends on the nature of the work. Refer to Table 1 for examples.

Table 1 — Examples of work characteristics

Sector or function	Work	Roles	Examples of demand
Manufacturing	Ship, store, pack, assemble, component, line, task	Line worker, driver, checker, machine operator, packer	Headcount per shift
Project delivery	Portfolio, programme, projects, team, phase, element, task	Front-end developer, senior bridge designer, stakeholder manager, trainer	Hours per task
Corporate support	Position, location	Talent acquisition officer, eastern region compliance officer, chief financial officer, receptionist	Number of positions, FTE

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5.4 Worker characteristics

Characteristics of workers, relevant to allocation, should be identified in a way that considers:

1) worker availability or unavailability;

2) worker attributes, e.g. their roles, skills, competences, education (certifications or accreditations), location, preferences and/or restrictions (physical, sensory or cognitive);

3) source of the worker, e.g. employee, contractor, secondment.

5.5 Allocation characteristics

Characteristics of allocation should be identified in a way that considers:

1) method of allocation, e.g. human judgement, automated or technology assisted;

2) allocation granularity, for example whether work is at a project level, phase level, shift or task level;

3) outcome dependence, i.e. whether workers are to be allocated work with or without considering outcomes, e.g. ability to deliver, utilization or productivity or workloads;

4) driving constraints, i.e. whether work or workforce capacity is ultimately fixed at the time of allocation:

   a) workforce-constrained, i.e. capacity drives work that can be delivered, e.g. typical agile projects, permanent employees in professional services;

   b) work-constrained, i.e. work drives required capacity, e.g. waterfall projects, train drivers, casual employment in retail, manufacturing and fast food stores;

   c) both work and workforce constrained, e.g. hospital units with fixed capacity and critically ill patients, projects with fixed team sizes and delivery dates;

5) implications and complexity, for example whether allocation can impact potentially more important work planned or to what degree individual allocation decisions are interrelated (e.g. inter-project dependencies);

6) allocation strategy, i.e. the approach to matching work to workers, based on the complexity of the allocation scenario. For example, an allocator can list the work to be assigned in order of priority (e.g. deadline) and then match a worker to each work item. Alternatively, an allocator can list workers (e.g. seniority) in order of priority and match work to one worker at a time. In complex situations, optimization algorithms would consider simultaneous matching for an optimal result.

This is not an exhaustive list of allocation characteristics and can vary depending on, for example, the nature of business, regulatory framework, customers and products.

5.6 Allocator characteristics

Characteristics of the people responsible and/or the systems used for assigning workers to work should be identified. Allocators can include line managers, functional managers in a matrix organization, workforce planners or allocators or the workers themselves. Allocator attributes can include their location, skills, competences, education (certifications or accreditations), role or more.

EXAMPLE Industrial engineers in manufacturing, nurse managers in healthcare, programme managers in project-based environments.

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5.7 Communication characteristics

Characteristics of communication relevant to allocation should be identified in a way that includes:

1) what is communicated, i.e. how and when workers are informed, and which information;
2) the channels and media used for communication, e.g. digital, emails, notice boards;
3) how privacy is protected and security ensured;
4) communication visibility, equity, efficiency and the culture of the organization;
5) frequency of communication.

5.8 Stakeholders

Stakeholders that influence, or are impacted by, workforce allocation decisions should be identified.

Stakeholders in workforce allocation include, but are not limited to, operations, finance, HR, workers, employee representatives, regulatory or government bodies and customers.

NOTE Stakeholders provide information that inputs into, or receive information output from, the workforce allocation process (e.g. budgets from finance, shift rosters, availability plans). This is vital for the workforce allocation process and can include information regarding timely delivery (operations), assignment or allocation of work (people) and adherence to budgets (finance).

5.9 Rules and policies

Rules and policies that impact the workforce allocation process should be identified in a way that ensures all stakeholders understand the implications for their role and responsibilities in the allocation process, including:

1) statutory, regulatory and contractual rules;
2) contractual agreements with:
    a) employees, e.g. employment contracts;
    b) employee representations, e.g. collective labour agreements, trade unions, labour organizations;
    c) contractors, e.g. supply chain partner agreements to provide workers;
    d) customers, e.g. service-level agreements;
3) organizational policies, such as:
    a) health, safety and well-being, e.g. minimum presence of first aiders and/or fire wardens per work area;
    b) diversity and inclusion;
    c) special work requirements in areas prone to natural catastrophes or disasters;
    d) privacy;
    e) data security;
4) worker requirements and expectations, such as:
    a) the right to accept or reject work;
    b) travel for work;
    c) overtime or fatigue restrictions;

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d) commuting from/to workplaces;

5) worker autonomy and self-allocation policies;

6) flexibility for workers, including:

a) measures to avoid work–family conflicts or improve work–life balance;

b) options to organize working time flexibly, e.g. flexitime or temporary or permanent part-time work;

c) team self-organization, e.g. workers who assign shifts among themselves, an agile project team that pulls tasks from a backlog;

d) on-site and remote work arrangements;

7) flexibility for the organization.

Organizations should identify elements of flexibility to address demand fluctuations and uncertainty of work information, such as:

a) time banking to deploy staff flexibly and address seasonal demand fluctuations;

b) stand-by and relief staff to address unforeseeable demand patterns or as a relief for unforeseeable absenteeism;

c) workforce mobility, e.g. within certain geographical boundaries.

Certain elements of flexibility can benefit the organization and workers. For example, when extra time is worked, a credit is tallied (e.g. time accounts, time-in-lieu). This credit can be drawn from for future absences. In other cases, absences can be taken in advance, and extra time worked later.

While flexibility is beneficial for both the workers and the organization, the principle is to drive organizational efficiency and effectiveness while maintaining workers' well-being. If applicable, attention should be paid to the participation of the employee representatives on the introduction, conditions and implementation of flexible work.

5.10 Objectives and success factors

The objectives of workforce allocation should be identified and guided by certain principles of effective workforce allocation (refer to the Introduction).

Success factors should be identified and documented so the organization can measure the success of allocation by:

1) validating forecast outcomes against target outcomes (refer to 7.6.2.4);

2) measuring the success of past allocation system performance (refer to Clause 9).

Forecast outcomes are essential for validation processes and can be categorized for:

a) delivery, e.g. output, timely delivery, performance;

b) people, e.g. workload, physical, mental and social well-being;

c) finance, e.g. utilization, adherence to budgets.

Success factors that identify target allocation outcomes and system performance should be documented based on objectives. They should be expressed in ranges of tolerance (e.g. forecast utilization could be limited to between 110 % and 80 %). This will enable the organization to confirm forecast outcomes are acceptable, period by period, into the future and monitor the performance and progress of the workforce allocation processes to generate a feedback loop for continual improvement.

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6 Create a framework

Every organization should have an effective workforce allocation framework that supports the organization's operational objectives and successful delivery of performance goals. The allocation framework should accommodate one or more workforces (each with its own distinct allocation process) and include the following suggested management principles.

Participant(s) in the framework design should be considered. These participants could include a wide range of stakeholders (refer to 5.8).

1) Responsibilities and authority should be confirmed and documented in a job or position description that provides a mandate, a specific scope and an explanation of the authority that the job can or should exercise.

   A workforce allocation function can be integrated in other organizational functions or reside as an independent unit in the organization. It should provide scope and authority to affect the desired operational outcomes.

2) Accountability for allocation delivery should be confirmed and documented in a set of performance goals that are measurable, contribute to the organizational strategy and have clearly identified ownership within the organizational structure.

   Accountability should ensure organizational integrity so that policy and practices are compatible. In applying workforce allocation practices, the organization's environmental, social and corporate governance standards should be observed.

   Workforce allocation function accountability should be documented in job descriptions or duty statements that include associated metrics that measure the job's effectiveness. Including accountability in job descriptions creates transparency critical to the communication with workers. It allows people to trust what the organization says it values and ensures that stated expectations are aligned and valid.

3) Operational resourcing for effective workforce allocation should be confirmed and documented to ensure clear visibility of workload, capacity and capability has been established. The workforce allocation function should ensure that it has access to all information relating to the distributable workload it is servicing, resource capacity and other constraints.

   Workforce allocators should be trained (even accredited) and operate with a solid understanding of the needs, goals and constraints of the organization and stakeholders.

4) Expectations of leadership in driving the importance of workforce allocation should be confirmed and documented. Leadership should drive agreement, enablement and sustainment of desired operational outcomes. Leadership should align other organizational functions and ensure an appropriate level of employee participation and involvement of employee representations in line with organizational policies and culture.

5) Transparency of the framework should ensure workers understand the organization's expectations by making allocation rules and protocols concise, accessible, consistently applied and supported by operational leadership. Ways to communicate the framework and any modifications to it should be confirmed and documented.

6) Acknowledging the ability of workers to exercise some degree of autonomy around accepting or declining assigned work should be documented. Exercising an option to decline or query the assignment can occur due to the workers' capacity, capability, authority or license to operate.

7) Communication to every worker and stakeholder at every level, to ensure an effective and sustainable allocation process, should be confirmed and documented. Communication processes

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