

HS.1	HS.2	HS.3	HS.4
Life cycle involvement	Integrate human factors	Usability engineering	Human resources
<p>HS.1.1 Human-system issues in conception</p> <p>HS.1.2 Human-system issues in development</p> <p>HS.1.3 Human-system issues in production and utilization</p> <p>HS.1.4 Human-system issues in utilization and support</p> <p>HS.1.5 Human-system issues in retirement</p>	<p>HS.2.1 Human-system issues in business strategy</p> <p>HS.2.2 Human-system issues in quality management</p> <p>HS.2.3 Human-system issues in authorisation and control</p> <p>HS.2.4 Management of human-system issues</p> <p>HS.2.5 HF data in trade-off and risk mitigation</p> <p>HS.2.6 User involvement</p> <p>HS.2.7 Usability engineering integration</p> <p>HS.2.8 Develop and re-use HF data</p>	<p>HS.3.1 Context of use</p> <p>HS.3.2 User requirements</p> <p>HS.3.3 Produce design solutions</p> <p>HS.3.4 Human Factors evaluation</p>	<p>HS.4.1 Human resources strategy</p> <p>HS.4.2 Define standard competencies and identify gaps</p> <p>HS.4.3 Design staffing solution and delivery plan</p> <p>HS.4.4 Evaluate product system solutions and obtain feedback</p>

HS.1.1	HS.1.2	HS.1.3	HS.1.4	HS.1.5
Human-system issues in conception	Human-system issues in development	Human-system issues in production and utilization	Human-system issues in utilization and support	Human-system issues in retirement
<p>HS.1.1.BP1 Identify expected context of use of product systems</p> <p>HS.1.1.BP2 Analyse the product system concept</p> <p>HS.1.1.BP3 Describe the objectives which the user or user organisation wants to achieve through use of the product system</p> <p>HS.1.1.BP4 Identify and analyse the roles of each group of stakeholders likely to be affected by a product system</p> <p>HS.1.1.BP5 Perform research into required product system usability</p> <p>HS.1.1.BP6 Present context and human resources options and constraints</p> <p>HS.1.1.BP8 Contribute to the business case for the product system</p>	<p>HS.1.2.BP1 Generate design options for each aspect of the product system related to its use and its effect on stakeholders</p> <p>HS.1.2.BP2 Produce human centred solutions for each design option</p> <p>HS.1.2.BP3 Design for customisation</p> <p>HS.1.2.BP4 Develop simulation or trial implementation of key aspects of the product system for the purposes of testing with users</p> <p>HS.1.2.BP5 Collect user input on the usability of the developing product system</p> <p>HS.1.2.BP6 Assess the health and well-being risks to the users of the product system</p> <p>HS.1.2.BP7 Assess the risks to the community and environment arising from human error in the use of the product system</p>	<p>HS.1.3.BP1 Evolve options and constraints into an implementation strategy covering technical, integration, and planning and manning issues</p> <p>HS.1.3.BP2 Identify, specify and produce the infrastructure for the product system</p> <p>HS.1.3.BP3 Maintain contact with users and the client organisation throughout the definition, development and introduction of a product system</p> <p>HS.1.3.BP4 Build required competencies into training and awareness programmes</p> <p>HS.1.3.BP5 Test that the product system meets the requirements of the users, the tasks and the environment, as defined in its specification</p> <p>HS.1.3.BP6 Analyse feedback on the product system during delivery and inform the organisation of emerging issues</p>	<p>HS.1.4.BP1 Produce personnel strategy</p> <p>HS.1.4.BP2 Deliver training and workshops to users and maintainers</p> <p>HS.1.4.BP3 Review the product system for adherence to applicable human science knowledge, style guides, standards, guidelines, regulations and legislation</p> <p>HS.1.4.BP4 Assess the effect of change on the usability of the product system</p> <p>HS.1.4.BP5 Review the health and well-being risks to the users of the product system</p> <p>HS.1.4.BP6 Review the risks to the community and environment arising from human error in the use of the product system</p> <p>HS.1.4.BP7 Take action on issues arising from in service assessment</p> <p>HS.1.4.BP8 Perform research to refine and consolidate operation and support strategy for the product system</p>	<p>HS.1.5.BP1 Collect and analyse in-service reports to generate updates or lessons learnt for the next version of the product system</p> <p>HS.1.5.BP2 Identify risks and health and safety issues associated with removal from service and destruction of the product system</p> <p>HS.1.5.BP3 Define how users will be re-allocated, dismissed, transferred to other duties.</p> <p>HS.1.5.BP4 Plan break-up of social structures</p> <p>HS.1.5.BP5 Debriefing and retrospective analysis for replacement version</p>

HS.2.1	HS.2.2	HS.2.3	HS.2.4	HS.2.5	HS.2.6	HS.2.7	HS.2.8
Human-system issues in business strategy	Human-system issues in quality management	Human-system issues in authorisation and control	Management of human-system issues	HF data in trade-off and risk mitigation	User involvement	Usability engineering integration	Develop and re-use HF data
<p>HS.2.1.BP1 Define usability as a competitive asset</p> <p>HS.2.1.BP2 Set usability objectives for product systems</p> <p>HS.2.1.BP3 Follow competitive situation in the market place</p> <p>HS.2.1.BP4 Develop user-centred infrastructure</p> <p>HS.2.1.BP5 Management relate HS to business benefits</p>	<p>HS.2.2.BP1 Establish and communicate a policy for human-centredness</p> <p>HS.2.2.BP2 Include HR and user centred elements in support and control procedures</p> <p>HS.2.2.BP3 Define and maintain HCD and HR infrastructure and resources</p> <p>HS.2.2.BP4 Increase and maintain awareness of usability</p> <p>HS.2.2.BP5 Develop or provide staff with suitable HS skills</p>	<p>HS.2.3.BP1 Take account of stakeholder and user issues in acquisition activities</p> <p>HS.2.3.BP2 Take account of HS issues in financial management</p> <p>HS.2.3.BP3 Assess and improve HS capability in processes which affect usability</p> <p>HS.2.3.BP4 Include HS review and sign-off in all reviews and decisions</p>	<p>HS.2.4.BP1 Develop a plan to achieve and maintain usability throughout life</p> <p>HS.2.4.BP2 Identify the specialist skills required and plan how to provide them</p> <p>HS.2.4.BP3 Manage life cycle plan to address HS issues</p>	<p>HS.2.5.BP1 Plan and manage use of HF data to mitigate risks related to HS issues</p> <p>HS.2.5.BP2 Assess the extent to which usability criteria and other HS requirements are likely to be met by the proposed design</p> <p>HS.2.5.BP3 Evaluate the current severity of emerging threats to product system usability and other HS risks and the effectiveness of mitigation measures</p> <p>HS.2.5.BP4 Take effective mitigation to address risks to product system usability</p>	<p>HS.2.6.BP1 Advocate the user perspective</p> <p>HS.2.6.BP3 Assess the risks of not involving end users in each evaluation</p> <p>HS.2.6.BP4 Define a strategy and plan for user involvement</p> <p>HS.2.6.BP5 Select and use the most effective method to elicit user input</p> <p>HS.2.6.BP6 Take account of user input and inform users</p>	<p>HS.2.7.BP1 Develop a common terminology for HS issues with the organisation</p> <p>HS.2.7.BP2 Facilitate personal and technical interactions related to HS issues</p> <p>HS.2.7.BP3 Identify and use the most suitable data formats for exchanging HF data</p> <p>HS.2.7.BP4 Customise tools and methods as necessary for particular projects/stages</p> <p>HS.2.7.BP5 Identify emerging HS issues</p>	<p>HS.2.8 BP1 Have a policy for HF data management</p> <p>HS.2.8 BP2 Perform research to develop HF data as required</p> <p>HS.2.8 BP3 Produce coherent data standards and formats</p> <p>HS.2.8 BP4 Define rules for the management of data</p> <p>HS.2.8 BP5 Develop and maintain adequate data search methods</p> <p>HS.2.8.BP6 Seek and exploit expert guidance and advice on HS issues</p>

HS.3.1	HS.3.2	HS.3.3	HS.3.4
Context of use	User requirements	Produce design solutions	Human factors evaluation
<p>HS.3.1.BP1 Define the scope of the context of use for the product system</p> <p>HS.3.1.BP2 Analyse the tasks and worksystem</p> <p>HS.3.1.BP3 Describe the characteristics of the users</p> <p>HS.3.1.BP4 Describe the cultural environment/organisational/management regime</p> <p>HS.3.1.BP5 Describe the characteristics of any equipment external to the product system and the working environment</p> <p>HS.3.1.BP6 Describe the location, workplace equipment and ambient conditions</p> <p>HS.3.1.BP7 Analyse the implications of the context of use</p> <p>HS.3.1.BP8 Present these issues to project stakeholders for use in the development or operation of the product system</p>	<p>HS.3.2.BP1 Set and agree the expected behaviour and performance of the product system with respect to the user</p> <p>HS.3.2.BP2 Develop an explicit statement of the user requirements for the product system</p> <p>HS.3.2.BP3 Analyse the user requirements</p> <p>HS.3.2.BP4 Generate and agree on measurable criteria for the product system in its intended context of use</p> <p>HS.3.2.BP5 Present these requirements to project stakeholders for use in the development and operation of the product system</p>	<p>HS.3.3.BP1 Distribute functions between the human, machine and organisational elements of the product system best able to fulfil each function</p> <p>HS.3.3.BP2 Develop a practical model of the user's work from the requirements, context of use, allocation of function and design constraints for the product system</p> <p>HS.3.3.BP4 Produce designs for the user-related elements of the product system that take account of the user requirements, context of use and HF data</p> <p>HS.3.3.BP5 Produce a description of how the product system will be used</p> <p>HS.3.3.BP6 Revise design and safety features using feedback from evaluations</p>	<p>HS.3.4.BP1 Plan the evaluation</p> <p>HS.3.4.BP2 Identify and analyse the conditions under which a product system is to be tested or otherwise evaluated</p> <p>HS.3.4.BP3 Check that the product system is fit for evaluation</p> <p>HS.3.4.BP4 Carry out and analyse the evaluation according to the evaluation plan</p> <p>HS.3.4.BP5 Understand and act on the results of the evaluation</p>

HS.4.1	HS.4.2	HS.4.3	HS.4.4
Human resources strategy	Define standard competencies and identify gaps	Design staffing solution and delivery plan	Evaluate system solutions and obtain feedback
<p>HS.4.1.BP1 Decide the goals, behaviours and tasks of the organisation</p> <p>HS.4.1.BP2 Define the global numbers, skills and supporting equipment needed to achieve those tasks</p> <p>HS.4.1.BP3 Decide how many people are needed to fulfil the strategy and what ranges of competence they need</p> <p>HS.4.1.BP4 Implement the HR strategy that gives the organisation a mechanism for implementing and recording lessons learnt</p> <p>HS.4.1.BP5 Feedback into future HR procurement, training and delivery strategies</p> <p>HS.4.1.BP6 Enable and encourage people and teams to work together to deliver the organisation's objectives</p>	<p>HS.4.2.BP1 Identify current tasking/duty</p> <p>HS.4.2.BP2 Analyse gap between existing and future provision</p> <p>HS.4.2.BP3 Identify skill requirements for each role</p> <p>HS.4.2.BP4 Predict staff wastage between present and future</p> <p>HS.4.2.BP5 Calculate the available staffing taking account of working hours, attainable effort and non-availability factor</p> <p>HS.4.2.BP6 Compare to define gap and communicate requirement to design of staffing solutions</p> <p>HS.4.2.BP7 Create capability to meet system requirements in the future (conduct succession planning)</p> <p>HS.4.2.BP8 Produce and promulgate a validated statement of shortfall by number and range of competence</p>	<p>HS.4.3.BP1 Identify and allocate the functions to be performed</p> <p>HS.4.3.BP2 Specify and produce job designs and competence/skills required to be delivered</p> <p>HS.4.3.BP3 Calculate the required number of personnel</p> <p>HS.4.3.BP4 Generate costed options for delivery of training and/or redeployment</p> <p>HS.4.3.BP5 Evolve options and constraints into an optimal implementation plan</p> <p>HS.4.3.BP6 Develop and trial training solution to representative users</p> <p>HS.4.3.BP7 Deliver final training solutions to designated staff according to agreed timetable</p> <p>HS.4.3.BP8 Identify any opportunities for redeployment</p>	<p>HS.4.5.BP1 Develop a strategy for data gathering</p> <p>HS.4.5.BP2 Provide means for user feedback</p> <p>HS.4.5.BP3 Conduct assessments of usability</p> <p>HS.4.5.BP4 Interpret the findings</p> <p>HS.4.5.BP5 Validate the data</p> <p>HS.4.5.BP6 Check that the data are being used</p>