

Profile title	SYSTEMS ARCHITECT ROLE (21)		
Summary statement	Plans, designs and integrates ICT system components including hardware, software and services.		
Mission	Designs, integrates and implements complex technical ICT solutions ensuring procedures and models for development are current and comply with common standards. Monitors new technology developments and applies if appropriate. Provides technological design leadership.		
Deliverables	Accountable	Responsible	Contributor
	<ul style="list-style-type: none"> Solution Specification Integrated Solution 	<ul style="list-style-type: none"> Solution and Critical Business Process Integration Proposal 	<ul style="list-style-type: none"> Development Process
Main task/s	<ul style="list-style-type: none"> Specify and implement the architecture of complex ICT solutions Lead development and integration of components Lead and/ or conduct system integration Ensure incorporation of security by design Analyse technical and business requirements Develop and maintain a comprehensive record of usability requirements 		

The table above is an extract from *European ICT professionals role profiles* Ref. No. CWA 16458-1:2018 E © 2018 CEN

The following pages map SFIA skills and competency levels to the role profile. There are 2 parts to the mapping:

- The Level of responsibility.**

A common language is used to describe levels of responsibility across roles in all professional disciplines. The SFIA Framework consists of seven levels of responsibility; Level 1, the lowest, to Level 7, the highest. The levels describe the behaviours, values, knowledge and characteristics that an individual should have in order to be identified as competent at the level. Each of the levels is also labelled with a phrase to summarise the level of responsibility.

Level 7	Set strategy, inspire, mobilise
Level 6	Initiate, influence
Level 5	Ensure, advise
Level 4	Enable
Level 3	Apply
Level 2	Assist
Level 1	Follow

- The Professional skills.**

SFIA 7 consists of 102 professional skills. Each skill description is made up of an overall definition of the skill and a description of the skill at each of up to seven levels.

The skill level descriptions provide a detailed definition of what it means to practice the skill at each level of competency. The skill level descriptions are aligned to the 7 levels of responsibility which ensures consistency throughout the SFIA framework making it solid and robust across professional disciplines.

Skill name	Digital forensics
Skill code	DGFS
Overall description of skill	The collection, preserving, analysing, and presentation of forensic evidence based on the totality of findings including computer-related evidence in support of security vulnerability mitigation and/or criminal, fraud, counterintelligence, or law
Generic definition of level	Skill at a level
Autonomy	Works under general direction within a clear framework of accountability...
Influence	Influences customers, suppliers and partners at account level.
Complexity	Work includes a broad range of complex technical or professional activities, in many cases.
Knowledge	Has a thorough understanding of recognised, present industry bodies of knowledge...
Business skills	Communicates fluently, orally and in writing, and for career.
DGFS Level 4:	Contributes to digital forensics investigations. Prepares and analyses evidence in line with policy, standards and guidelines and supports production of forensic findings and reports.

NB: This is an illustrative skills profile only. It may not be the best fit for your organization. Anyone using this document should take care to apply the principles of SFIA to their own organisation and role design. See the [SFIA website](#) for further guidance.

EU ICT Systems Architect role (21)

SFIA Generic Responsibility Levels for the Role

Autonomy - Level 5

- Works under broad direction
- Work is often self-initiated
- Is fully responsible for meeting allocated technical and/or project/supervisory objectives
- Establishes milestones and has a significant role in the assignment of tasks and/or responsibilities

Influence - Level 5

- Influences organisation, customers, suppliers, partners and peers on the contribution of own specialism
- Builds appropriate and effective business relationships
- Makes decisions which impact the success of assigned work, i.e. results, deadlines and budget
- Has significant influence over the allocation and management of resources appropriate to given assignments
- Leads on user/customer collaboration throughout all stages of work
- Ensures users' needs are met consistently through each work stage

Complexity - Level 5

- Performs an extensive range and variety of complex technical and/or professional work activities
- Undertakes work which requires the application of fundamental principles in a wide and often unpredictable range of contexts
- Understands the relationship between own specialism and wider customer/organisational requirements

Knowledge - Level 5

- Is fully familiar with recognised industry bodies of knowledge both generic and specific
- Actively seeks out new knowledge for own personal development and the mentoring or coaching of others
- Develops a wider breadth of knowledge across the industry or business
- Applies knowledge to help to define the standards which others will apply

Business Skills - Level 5

- Demonstrates leadership
- Communicates effectively, both formally and informally
- Facilitates collaboration between stakeholders who have diverse objectives
- Analyses, designs, plans, executes and evaluates work to time, cost and quality targets
- Analyses requirements and advises on scope and options for continuous operational improvement
- Takes all requirements into account when making proposals
- Demonstrates creativity, innovation and ethical thinking in applying solutions for the benefit of the customer/stakeholder
- Advises on the available standards, methods, tools and applications relevant to own specialism and can make appropriate choices from alternatives
- Maintains an awareness of developments in the industry
- Takes initiative to keep skills up to date
- Mentors colleagues
- Assesses and evaluates risk
- Proactively ensures security is appropriately addressed within their area by self and others
- Engages or works with security specialists as necessary
- Contributes to the security culture of the organisation

EU ICT Systems Architect role (21)

SFIA Professional Skills for the Role

Core - all people performing this job will need this skill. Optional - some people performing this job will need the skill.

Core: Systems design @ Level 5

- Selects, adopts and adapts appropriate systems design methods, tools and techniques selecting appropriately from plan-driven/predictive approaches or more adaptive (iterative and agile) approaches, and ensures they are applied effectively
- Designs large or complex systems
- Undertakes impact analysis on major design options and trade-offs, makes recommendations and assesses and manages associated risks
- Reviews others' systems designs to ensure selection of appropriate technology, efficient use of resources, and integration of multiple systems and technology
- Ensures that the system design balances functional and non-functional requirements
- Contributes to development of systems design policies and standards and selection of architecture components

Core: Requirements definition and management @ Level 5

- Plans and drives scoping, requirements definition and prioritisation activities for large / complex initiatives
- Selects, adopts and adapts appropriate requirements definition and management method, tools and techniques selecting appropriately from plan-driven/predictive approaches or more adaptive (iterative and agile) approaches
- Obtains input from and formal agreement to requirements from a diverse range of stakeholders
- Negotiates competing priorities and conflicts
- Establishes the requirements baseline
- Ensures changes to requirements are investigated and managed
- Contributes to the development of organisational methods and standards

Optional: Hardware design @ Level 5

- Specifies and designs complex hardware components/ systems
- Selects appropriate design standards, methods and tools, consistent with agreed enterprise policies, and ensures they are applied effectively
- Reviews others' designs to ensure selection of appropriate technology, efficient use of resources, and effective integration of multiple systems and technology
- Contributes to policy for selection of components
- Evaluates and undertakes impact analysis on major design options and assesses and manages associated risks
- Ensures that hardware designs balance functional, service quality, security, systems management and sustainability requirements

Optional: Software design @ Level 5

- Selects, adopts and adapts appropriate software design methods, tools and techniques; selecting appropriately from plan-driven/predictive approaches or more adaptive (iterative and agile) approaches
- Specifies and designs large or complex software components
- Undertakes impact analysis on major design options, makes recommendations and assesses and manages associated risks
- Specifies prototypes/simulations to enable informed decision making
- Evaluates the quality of others' systems designs to ensure adherence to standards and identifies corrective action, if needed
- Ensures that the system design balances functional, service quality, security and systems management requirements
- Contributes to development of organisational software design and architecture policies and standards
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Optional: Network design @ Level 5

- Produces outline system designs and specifications, and overall architectures, topologies, configuration databases and design documentation of networks and networking technology within the organisation
- Specifies user/system interfaces, including validation and error correction procedures, processing rules, access, security and audit controls
- Assesses associated risks, and specifies recovery routines and contingency procedures
- Translates logical designs into physical designs

Core: Systems integration and build @ Level 5

- Identifies, evaluates and manages the adoption of appropriate tools, techniques and processes (including automation and continuous integration) to create a robust integration framework
- Leads integration work in line with agreed system /service design
- Monitor and report on the results of each integration and build
- Designs and builds integration components and interfaces
- Contribute to the overall design of the service and the definition of criteria for product / component selection
- Contributes to development of systems integration policies, standards and tools

Core: Emerging technology monitoring @ Level 5

- Monitors the market to gather intelligence on emerging technologies
- Assesses and documents impacts, threats and opportunities to the organisation
- Creates technology roadmaps
- Shares knowledge and insights with others