Qualifications & certifications
Relating to SFIA

Given the popularity of SFIA around the world, it is natural that awarding bodies like to promote their products by showing which SFIA skills relate to the qualifications and certifications that they award. The process of determining the relationship between the certification and SFIA is referred to here as "mapping". The area of work that is the subject of the certification is referred to here as "the field".

[*Using SFIA in to promote products or services requires a fee-bearing licence. Details of the licence and how to obtain it can be found on the SFIA web site www.sfia-online.org*]

So, how to do the mapping?

You will not be surprised to hear that there is no simple process that will, if followed, yield the desired answer. Clearly, situations vary, and the quality of the output depends on the knowledge and judgement of the person doing the mapping.

However, it is possible to set out some guidelines. But first, four basic points:

- Understand – and state – what the mapping means. Don't leave this open to interpretation.
- Consider the 'Professional profile' for the typical (or intended) holder of the credential, to ensure that all the relevant SFIA Skills are mapped
- Refer to the generic SFIA Level description that relates to the general level of responsibilities of the typical (or intended) holder of the credential
- Recognise that gaining the membership, credential or technical skill will not, in itself, guarantee that the holder has SFIA skills at a given level. SFIA skill-levels reflect experience, influence and responsibility in an organisational context.

What does it mean?

What does the mapping mean to its intended audience? Is it . . .

- you are unlikely to get the certification if you don't have this skill
- you will almost certainly get the certification if you have the skill
- if you have this skill you really ought to apply for the certification
- going on courses and doing other work to achieve this certification will help you develop this skill
- we want to assure you that our certification has been developed with full cognisance of the relevant skills, as defined in an industry-standard way.
- the statement of requirements of the certification and the definition of the skill have a lot of overlap.

. . . or something else entirely?

These are not all mutually exclusive. However, it is important that the mapper is clear about the purposes of the mapping, and makes that clear to readers of the information generated.

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In answering this question, you will need to reconcile two things:

- why do we want to publish this information ?
- why and how will the reader use the mapping ?

Some reasons for doing a mapping are set out below. [*Appendix 1 – Purposes of* Mapping]

Who does the mapping?

The mapping process involves seeing right through the requirements of the certification and understanding the practicality that lies behind the words.

This tells us immediately that the mapping should be done by someone who is very familiar with the field (environment/knowledge/competence) that is the subject of the certification. Our mapper is surely **one who has this certification**.

The mapper who has **management experience in this field** will have, the advantage of a sense of what to expect from people who are working with the relevant competencies. This is likely to enhance the quality of the resulting mapping information. This could, of course, be addressed by involving more than one person: the mapping information can be generated by an "expert", and this can be reviewed by a manager experienced in the field.

Ideally, a SFIA Accredited Consultant who has the certification will be best placed to carry out the mapping. However, anyone who has practical experience of working in the field will be able to understand and interpret the SFIA information.

A proper understanding of SFIA is essential. If the mapper is not a SFIA Accredited Consultant, then attendance on an **authorised SFIA course** is indicated.

Resources needed

Information resources required are obviously:

- Requirements of the certification
- SFIA framework, including the definitions of SFIA's seven generic levels

The latter is available from the SFIA web site in various forms (pdf, spreadsheet and online browsable).

The mapper should have a full understanding of skills and skills development: for example, the difference between skill and knowledge. [1]

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[1] A competence typically requires certain behavioural skills, professional skills (from SFIA), knowledge and experience.

The Process

A good starting point is to have a generalised description of the type and level of IT professional at whom the certification is aimed. That will summarise the competencies of the target audience. One good starting point can be seen in the Professional Profiles set out below [*Appendix 2 – Classification of IT People by Professional Profiles*]

Levels

At the outset, and at intervals during the mapping, it will be useful to refer to SFIA's generic levels (1-7) to ensure that the right level of skill is being considered. Normally a certification is appropriate to someone at a fairly narrow range of SFIA levels, such as 4 & 5. (You will think about the typical candidate rather than one who easily exceeds the requirements.)

Decompose

Decompose the requirements of the certification into separate components. They will be interrelated, of course, but drawing some arbitrary lines should not cause any problems.

Analyse

Take each component in turn and determine the activities involved in doing work. You can then use SFIA to identify the skills that are required. Make sure you review the skills thoroughly: some of them deal with skills that are related.

In each case make sure that the level of skill is in line with your perception of the type of IT professional that the certification is aimed at.

You might consider that some skills are useful but optional in the situation you are looking at. In that case, reflect on the basic objectives of the mapping, as referred to above [*What does it mean?*]. You might decide that it is essential to include the "optional" skills, or you might decide that it will just make things too complicated.

As an example, consider the case of a software engineer. Clearly *PROG Programming and Software development* is essential. But in many cases, skills like . . .

DLMG	*Systems development management*
DTAN	*Data analysis*
DESN	*Systems design*
DBDS	*Database/repository design*
ADEV	*Animation development*
TEST	*Testing*
HCEV	*Ergonomic design*
HFIN	*Human factors integration*
SPIM	*Software development process improvement*
METL	*Methods and tools*

. . . are also required. You will need to decide how relevant they are to your target audience.

Don't limit your search to just one category of SFIA.

Appendix 1 – Purposes of Mapping

Examples of the purpose of mapping, with comment.

University Course

Purpose

- ensure that the course is relevant to the skills that will be expected of graduates when they are in subsequent employment, so that the course appeals to those who wish to be qualified for that sort of work
- lay the foundations that enable graduates subsequently to develop those skills
- in some cases, to start the skills development process
- communicate the value of the course to potential employers, so that they can understand the capability of graduates

The designer of an IT curriculum would be able to select the appropriate SFIA skills, given the SFIA framework.

Qualifications

Purpose

- communicate to potential applicants the usefulness and relevance of the qualification
- communicate the value of the qualification to potential employers of people having that qualification
- provide evidence that the qualification relates to IT work in a practical way

The mapper needs in-depth knowledge of the type of work that is performed by people with this qualification. It is also necessary to understand that way in which assessment of the individual is carried out (for example, the nature of examination questions)

It may useful to get help from a SFIA Accredited Consultant who has this qualification

Membership

Purpose

- ensure that membership is seen as relevant to people wishing to develop their careers or jobs
- ensure that the membership levels of an organisation relate to skill levels that are apparent in the workplace
- provide consistency of assessment across the spectrum of skills in the IT industry

The mapper needs in-depth knowledge of the type of work that is performed by people with this qualification. It is also necessary to understand that way in which assessment of the individual is carried out, whether by written examination, interview or CV assessment of CV

It may useful to get help from a SFIA Accredited Consultant who has membership of the organisation in question

Training courses

Purpose

- ensure that courses are seen to address the needs of the target market and as expressed by both attendees and procurers of training
- provide an integrating influence across a training portfolio, so that procurers of training can see the scope and structure of the of the portfolio
- set out, in skills terms, the entry qualifications of each course
- set out, in skills terms, the training outcome

The mapper needs a good appreciation of the structure and content of the whole training portfolio.

For each course, the mapper needs in-depth knowledge of the type of work that is performed by people whose work has been enabled by this training.

Appendix 2 – Classification of IT People by Professional Profiles

The approach to management of skills and capability of IT can be considerably enhanced by recognising what a person is (as distinct from what job that person happens to be doing at the moment).
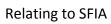
Those profiles can help here when you are visualising the type of person who might be interested in your qualification. The list below is used by Government in the UK. A few essential SFIA skills are shown, but in practice an individual would have more. A strength of this approach is that it represents the IT community in only 16 profiles. A person with any one of these profiles is capably of a variety of related jobs or assignments.

Profile	Description	Primary SFIA Competencies *
Chief Information Officer	Governs Information and Information Technology at highest level within an organisation	IT Governance (GOVN)
Chief Technical Officer	Executive level position responsible for ensuring that an organisation gets the most from existing technology.	IT Governance (GOVN) Systems Development Management (DLMG) IT Management (ITMG) Sustainability Management for IT (SUMI) Emerging Technology Monitoring (EMRG) Sustainability Strategy (SUST)
Architect	Develops, maintains and governs IT architecture across the organisation and assures its alignment with the business processes.	Solution Architect (ARCH) Information Systems Co-ordination (ISCO) Enterprise and Business Architecture Development (STPL) Information Security (SCTY) Business Analysis (BUAN) Business Modelling (BSMO) Systems Design (DESN)
Information Assurance Professional	Ensures information assurance and IT security appropriate to the needs of the business. Manages IT risk.	Information Assurance (INAS) Information Security (SCTY) Information Analysis (INAN) Information Management (IRMG) Business Risk Management (BURM) Security Administration (SCAD)
Business Analyst	Identifies business need Captures requirements and quantifies potential business benefits.	Business Analysis (BUAN) Business Process Improvement (BPRE) Stakeholder Relationship Management (RLMT) Requirements Definition and Management (REQM)

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Profile	Description	Primary SFIA Competencies *
Programme/Portfolio Manager	Oversight and control delivery of several related projects. At the senior level this could involve managing a portfolio or projects or programme, ensuring that a project achieves agreed objectives within time, cost and quality constraints. These may be IT projects and programmes or change-related projects and programmes.	Portfolio Management (POMG) Programme Management (PGMG) Benefits Management (BENM)
Project Manager	Ensures that a project achieves agreed objectives within time, cost and quality constraints. These may be IT-related projects or change-related projects.	Project Management (PRMG) Stakeholder Relationship Management (RLMT) Resourcing (RESC) IT Operations (ITOP)
Network/Systems Designer	Designs IT systems or networks that fit within the architecture of the organisation	Network Planning (NTPL) Network Design (NTDS) System Design (DESN)
Software/Systems Developer	Creates, tests and documents new and amended programs from supplied specifications.	Programming and Software Development (PROG) Database/Repository Design (DBDS)
Tester	Plans, designs and runs testing, engaging strategically with providers	Testing (TEST)
Service Integrator	Integrates components of different systems, often provided by suppliers or from the Cloud to provide operational services	Systems Integration (SINT)
Service Manager	Takes responsibility for service delivery, including negotiation and monitoring of Service Level Agreements with suppliers, and the reporting and on-going improvement to services.	Service Level Management (SLMO) Supplier Relationship Management (SURE) Stakeholder Relationship Management (RLMT) Quality Assurance (QUMG) Programme Management (PRMG) IT Operations (ITOP) Asset Management (ASMG) Release Management (RELM) Change Management (CHMG) Continuity Management (COPL) Capacity Management ((CPMG)

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Profile	Description	Primary SFIA Competencies *
Operation Support	Keeps Applications running, provides help desk services or hands-on problem fixing. May work on applications, networks or systems.	Service Desk and Incident Management (USUP) Applications Support (ASUP) IT Operations (ITOP) IT Management (ITMG) Database Administration (DBAD)
Commercial Manager	Procures and manages IT service contracts through life.	Procurement (PROC) Financial Management for IT (FMIT)
Customer Relationship Manager	Acts as a conduit between the business and IT department, ensuring issues and escalations are managed effectively on a day to day basis and that changes are made with clear reference to customer priorities.	Service Level Management (SLMO) Supplier Relationship Management (SURE) Client Services Management (CSMG) Account Management (ACMG)