Knowledge, skills, and competences: An Italian standard to define the archivist's profile within the European Qualifications Framework

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ABSTRACT

The European Qualifications Framework (EQF) for lifelong learning is a reference model established by the European Parliament and Council to support the improvement of education and training systems. Based on a multi-dimensional matrix where knowledge, skills and competences should be identified as learning outcomes and assigned their proper level of qualification, such a model may serve not only as a translation device between different education systems, but also as a tool for assessing a professional profile in a transparent and efficient way.

Building upon the results of an Italian initiative aimed at developing a national standard, this paper will show how the model may be applied to the archival domain, hence helping to identify the relevant features of the archivist's profile and consistently re-design archival curricula.

Keywords EQF • European Qualifications Framework • Italian standard • UNI 11536 • Archivist's profile

New technology and socio-economic phenomena like globalization have dramatically changed the labour market, resulting in a demand for new skills and professional figures able to cope with the change. This is more than true for the archival domain: the space in which archivists work, the tools they work with and the way they work have totally changed since the last century, to the point that the archival community is investigating whether the archivist's role and identity needs for a redefinition – rather: a reinterpretation – in light of these big changes.

These phenomena clearly affect education and training systems, which are struggling to be responsive to an increasing demand for new skills and competences. To this end, the European Union has assumed that *competences* are a central feature of any lifelong learning policy and launched a set of initiatives with the objective of reforming agendas "in vocational education and in tertiary education in the Member States [including] revision of curriculum and guidance, teacher training initiatives, and the development of new education programmes" (Shapiro, Lauritzen and Irving 2011). These actions are fundamental steps of a more ambitious initiative, the so-called *Bologna process*, which is an institutional process promoted since 1999 by the European Union and aimed at creating a European Higher Education Area (EHEA) meant to ensure comparability in the

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standards and quality of higher education qualifications (Vercruysse 2010). "Besides the general value of a European dimension of higher education for promoting intercultural understanding and collaboration, the [Bologna process] wants to respond to the increasing need to prepare graduates for the global labour market and has very practical objectives, such as transparency of curriculum content, facilitating mobility and building 'mutual trust' zones for quality" (Tammaro 2012, 196). To this aim, the "national educational and research systems in Europe (East and West) have initiated a close dialogue and entered into a close collaboration with each other" (Lørring 2006, 16). In particular, within the Library and Information Science domain, scholars and professionals have met to explore the knowledge map of the discipline (Zins 2007) and deal with the progressive Europeisation of curricula (Juznic and Badovinac 2005; Kajberg and Lørring 2005; Kajberg 2008; Spink and Heinstrom 2012; Kawalec 2014).

It is in this context that an Italian initiative had to be framed which was aimed at developing a national standard to define the qualifying features of the archivist, hence contributing to redesign consistently the archival curricula at graduate and post-graduate level. In fact, while not a proper educational standard, the outcome of the Italian initiative is a document that may be well be integrated into a national educational standard expressing, in a systematic and clear way, the essential goals of pedagogical work.

The Italian initiative is probably the first example of adoption and implementation in the archival domain of a European Recommendation[1]: in fact, the Italian initiative is based on the European Qualifications Framework (**EQF**) for lifelong learning, a reference model established by the European Parliament and Council in 2008, to support improvement of education and training systems (European Parliament and Council 2008). The European act recommends using the European Qualifications Framework as a reference tool to:

- compare the qualification levels of different qualification systems;
- promote lifelong learning and equal opportunities; and
- promote further integration of the European labour market, while respecting the rich diversity of national education systems.

Also, the Recommendation encourages relating the national qualifications systems to the EQF and adopting measures so that all new qualification certificates and diplomas issued by the competent authorities contain a clear reference to the appropriate EQF level. Therefore, EQF should be considered as a European reference model in the educational domain.

Its architecture is very simple: in fact, it is based on the triad of Knowledge, Skill, and Competence, which are considered as fundamental learning outcomes by which any professional profile may be identified.

Within the EQF framework, **Knowledge** is considered as a body of facts, principles, theories and practices that is related to a field of work or study. It is the outcome of the assimilation of information through learning, "the result of an interaction between intelligence (capacity to learn) and situation (opportunity to learn)"—hence its socially-constructed nature (Winterton, Delamaire-Le Deist and Stringfellow 2006, 6-7). Knowledge may be theoretical and/or factual: it includes theory and concepts, as well as experience resulting from performing certain tasks. In other words, Knowledge is about

[1] European Recommendations are not binding for Member States. They suggest a line of action without imposing any legal obligation on those to whom they are addressed.

holistic understanding of processes and contexts: it is "know-why, as opposed to know-that" (Winterton, Delamaire-Le Deist and Stringfellow 2006, 7).

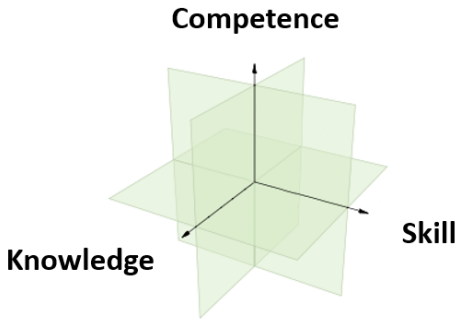

FIGURE 1.
The EQF Model: The Basic Structure

Knowledge is based on the ability of acquiring and understanding new knowledge, which in turn requires some cognitive prerequisites and specific knowledge and skills.

It is not always easy to distinguish between knowledge and skills. As a matter of fact, higher levels of competence are characterised by increasing proceduralisation of knowledge, so "at higher levels, knowledge is converted to skills" (Klieme et al. 2004, 70).

FIGURE 2.
Blurred Boundaries Between Knowledge and Skills

In the EQF model, **Skill** is defined as the ability to apply knowledge and use know-how to complete tasks and solve problems. It may be cognitive (involving the use of logical, intuitive and creative thinking) or practical (involving manual dexterity and the use of

methods, materials, tools and instruments). According to Proctor and Dutta (1995), there are different types of skills:

- perceptual skill (that is, ability to make distinctions and judgements);
- response selection skill (that is, ability to select the appropriate response);
- motor skill (related to manual aspects of performance); and
- problem-solving skill (that is, ability to control and modulate skills towards a goal).

However, the fundamental feature that needs to be highlighted here is that even very practical skills "depend upon understanding of results and verbalised knowledge" (Winterton, Delamaire-Le Deist and Stringfellow 2006, 28): broad cognitive skills (such as problem solving and decision making) affect skilled performance. As highlighted above, there is a thin line between knowledge and skills: it is difficult to regard "cognitive competences as knowledge rather than skill. Indeed, there is substantial evidence that acquiring skill and demonstrating skilled performance involve a combination of underlying perceptual, cognitive and motor skills" (Winterton, Delamaire-Le Deist and Stringfellow 2006, 28). This was particularly evident when we turned to the archival domain, since we could not establish clear boundaries between these two categories—the archival profession is really a complex mix of practical skills and theoretical competences.

Finally, as it regards the concept of **Competence**, there is an ongoing debate: it is impossible to identify a coherent theory or establish a definition capable of accommodating and reconciling all the different perspectives of such a complex and multiform concept (Elleström 1997; Robotham and Jubb 1996; quoted in Winterton, Delamaire-Le Deist and Stringfellow 2006). The EQF model assumes that Competence is the proven ability to use knowledge, skills and personal, social and/or methodological abilities, in work or study situations and in professional and personal development. Competence is described in terms of responsibility and autonomy.

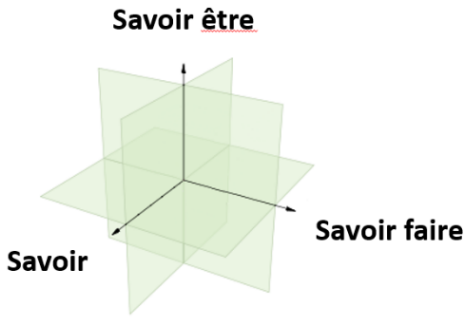

FIGURE 3.
The EQF Model: Intersection of Competences

Call it Knowledge, Skill, and Competence; or Savoir, Savoir faire, and Savoir être: in the end, the European model defines a 3-dimensional space, where archivists can find their own place at the intersection of cognitive, functional and social competences.

Finally, the EQF defines **Levels** in order to identify different degrees of qualifications in relation to knowledge, skills and competences. Levels allow the design of a range of triads increasing in complexity from Level 1 to Level 8.

TABLE 1.
The EQF Model[2]

Level	Knowledge	Skill	Competence
1	Basic general knowledge	Basic skills required to carry out simple tasks	Work or study under direct supervision in a structured context
2	Basic factual knowledge of a field of work or study	Basic cognitive and practical skills required to use relevant information in order to carry out tasks and to solve routine problems using simple rules and tools	Work or study under supervision with some autonomy
3	Knowledge of facts, principles, processes and general concepts, in a field of work or study	Range of cognitive and practical skills required to accomplish tasks and solve problems by selecting and applying basic methods, tools, materials and information	Take responsibility for completion of tasks in work or study Adapt own behaviour to circumstances in solving problems
4	Factual and theoretical knowledge in broad contexts within a field of work or study	Range of cognitive and practical skills required to generate solutions to specific problems in a field of work or study	Exercise self-management within the guidelines of work or study contexts that are usually predictable but are subject to change Supervise the routine work of others, taking some responsibility for the evaluation and improvement of work or study activities
5	Comprehensive, specialised, factual and theoretical knowledge within a field of work or study and an awareness of the boundaries of that knowledge	Comprehensive range of cognitive and practical skills required to develop creative solutions to abstract problems	Exercise management and supervision in contexts of work or study activities where there is unpredictable change Review and develop performance of self and others
6	Advanced knowledge of a field of work or study, involving a critical understanding of theories and principles	Advanced skills, demonstrating mastery and innovation, required to solve complex and unpredictable problems in a specialised field of work or study	Manage complex technical or professional activities or projects, taking responsibility for decision-making in unpredictable work or study contexts Take responsibility for managing professional development of individuals and groups
7	Highly specialised knowledge, some of which is at the forefront of knowledge in a field of work or study, as the basis for original thinking and/or research Critical awareness of knowledge issues in a field and at the interface between different fields	Specialised problem-solving skills required in research and/or innovation in order to develop new knowledge and procedures and to integrate knowledge from different fields	Manage and transform work or study contexts that are complex, unpredictable and require new strategic approaches Take responsibility for contributing to professional knowledge and practice and/or for reviewing the strategic performance of teams
8	Knowledge at the most advanced frontier of a field of work or study and at the interface between fields	Most advanced and specialised skills and techniques, including synthesis and evaluation, required to solve critical problems in research and/or innovation and to extend and redefine existing knowledge or professional practice	Demonstrate substantial authority, innovation, autonomy, scholarly and professional integrity and sustained commitment to the development of new ideas or processes at the forefront of work or study contexts including research

[2] European Parliament and Council 2008

As a consequence, we have a full range of Knowledge levels, ranging from "Basic general knowledge" to "Knowledge at the most advanced frontier of a field of work or study and at the interface between fields". Similarly, Skills range from "Basic skills required to carry out simple tasks" to "Most advanced and specialised skills and techniques, including synthesis and evaluation, required to solve critical problems in research and/or innovation and to extend and redefine existing knowledge or professional practice". Competences go from "Work or study under direct supervision in a structured context" to very high and qualified level of commitment in the area of work or study. The overall result is a matrix where Knowledge, Skills and Competences are related and defined according to the different levels (see Table 1).

Such a matrix can be a useful tool to reconsider archival activities in a different light: this consideration was one of the fundamental drivers of the Italian initiative, based on this model and promoted by the Italian Standards Organization (UNI – Ente nazionale italiano di unificazione). UNI was established in 1921 and later recognized by the Italian government and the European Union as the official Italian standardization body. It is responsible for the creation, publication and promotion of standards and technical reports in all areas of social, commercial and industrial activity[3].

The standardization activities eventually led to the formal publication of UNI 11536:2014, the first Italian standard on the "Professional archivist's profile. Defining requirements for knowledge, skills and competences".

We believe that such a standard may improve the social and professional identification of archivists as proactive agents not only within their specific domain – as specialists of information and documentation processes – but also in the broader societal context, in their fundamental role as managers and preservers of cultural heritage, hence supporting local communities and societies at large in their ongoing action of self-definition. In other words, on the one hand the standard may be used as a technical document, to clarify what archivists can do, so that stakeholders know that there is a well-identified professional figure with specific skills to address their needs. On the other hand, standards are social tools too, and as such they are admittedly a valuable expression of power. Archivists struggle to reach the larger audience, and their voice can hardly be heard in the public discourse among the voices of stronger and more appealing actors. Standards speak the exotic technical language, and they tell us about the existence of a community, a lobbying action, an economic power—that is why standards somehow confer an aura of prestige to the supporting community. Therefore, the national standard on the professional figure may help positioning the archivists in the public arena and enhancing their capacity of action.

The standard may also improve education processes at graduate and post-graduate level: knowledge, skills and competences defined in the standard may be adopted as a criterion or a guide to design a coherent and comprehensive educational program. The training processes may benefit as well from the standard, since it may help identifying specific areas and skills that need to be covered in training courses in order to enhance the qualification of the archivists.

The core of the standard is a **scheme** where functions, activities, competences, skills and knowledge are organized in a systematic way. It is impossible to present the whole scheme in detail here, so we will provide an overview, focusing on some specific parts in order illustrate how the document has been designed. The philosophy that drove the

[3] Except for electrical, electronic and related technologies, collectively known as electrotechnology, which are covered by Comitato elettrotecnico italiano (CEI).

development of the standard can be expressed well borrowing words from Richard Pearce-Moses:

"*What* information professionals do in the digital era remains the same. They must still work with record creators and publishers to build the collection; manage the organization of the materials, their preparation for use, and their preservation; and they must work with the public and other users to provide access to the collections. None of that changes in the digital era. However, […] *how* information professionals do their jobs will change" (Pearce-Moses and Davis 2008, ix).

In other words, the standard has been developed assuming that the fundamental functions and activities of the archival profession have not changed. The working group believes that archivists – rather, archival activities – can be identified and described using categories that are largely independent from the specific context, and avoiding any reference to technologies, environments, media. The objective was to create a general-purpose standard that may be used in different contexts and does not become obsolete in a short time. On the other hand, these features may be interpreted as disadvantages in a different perspective: the standard is too generic, hence needs for some customization in order to be implemented in a specific context; and its longevity may hinder the review and update processes. Therefore, a two-step approach can probably combine the best of the two options: the creation of the standard may be followed – if needed – by refinements designed to take into account specific needs.

The very first level of the scheme identifies the threefold **mission** of the archivist:

- manage archives through their life;
- provide access to archives; and
- manage and run archival services.

Each mission is then organized into **functions**, as depicted in Table 2.

TABLE 2.
Qualifying Archivists: Mission and Functions

Mission	Function
Manage archives through their life, from design, creation and accumulation to preservation stage	1. Records management 2. Protection 3. Appraisal and disposition 4. Arrangement and description 5. Preservation 6. Design and appraisal of information systems and applications
Provide access to archives, setting up and running services for users, promoting knowledge of archival resources and encouraging skilled training and education	7. User services 8. Promotion, training and education 9. Research
Manage and run archival services, planning their development and governing their resources	10. Management and administration

The standard provides a brief description of each function, as showed below.

1. Records management	All of the activities aimed at governing creation, maintenance, handling, use and disposition of records.
2. Protection	All of the activities aimed at monitoring and safeguarding non-State archives, carried out through a widespread auditing action performed by Archival Superintendencies. This function includes all the activities carried on by Vigilance Commissions[4]. In brief, this function refers to activities that entail decision-making responsibilities that fall in the exclusive competence of State archivists. However, freelance archivists may support such activities.
3. Appraisal and disposition	All of the activities aimed at evaluating the historical and legal value of records, in order to identify those records that need to be preserved forever, and those that may be destroyed. This function may be carried out by officers working for the records creator.
4. Arrangement and description	All of the intellectual and practical activities aimed at analyzing, organizing and describing archival materials on the basis of archival principles.
5. Preservation	All of the activities aimed at preserving documentary systems and objects along with their relationships, in such a way that their significant properties are not altered. This objective is achieved by implementing adequate environmental conditions, ongoing control of objects, and designing proper strategies for their safety and preventing damage to them.
6. Design and appraisal of systems and applications	All of the activities aimed at designing or assessing information systems or software in the archival domain.
7. User services	All of the activities aimed at supporting users in archival research.
8. Promotion, training and education	All of the activities aimed at promoting knowledge of archival resources and delivering training and education initiatives in the archival field.

[4] The Vigilance Commissions are established – with some approximation – in every office belonging to the State administration with a jurisdiction no narrower than the province. These Commissions are responsible for invigilating on the recordkeeping activities of the office, collaborating in the definition of the recordkeeping and preservation criteria, selecting the records for disposal, coordinating the disposal activities, and identifying sensitive records.

9. Research	Archivists use their knowledge in the service of scientific research. Archivists also have a specific, autonomous role with reference to research in history, historiography, institutions, archives, and more generally any information science topic. Hence, archivists' curriculum vitae may include publication of essays and books, organization of, and/or participation in conferences and research projects, as well as editorial activities.
10. Management and administration	The management of documentary heritage, human and financial resources, facilities and tools requires mastery of a complex body of laws and regulations, as well as a wealth of administrative and organizational skills in order to govern institutions or services committed to the preservation of documentary heritage, ensuring the safety of people, property and places. Knowledge of the market and the current legislation, as well as the ability to develop and evaluate projects and contract specifications, is critical in supply and demand for archives services.

According to the standard, not every archivist has to perform all these functions: the functions listed above are those that are considered pertinent to the archival profile. Altogether they shape the professional identity of the archivist, but it is not mandatory for every archivist to perform them all in their daily activity: specialization is encouraged as in any other field. However, any specialist still belongs to a broader professional community. Records managers and description specialists are essentially archivists; rather, in the first instance they are archivists, like a cardiologist is essentially a physician.

Each archival function is articulated as **activities**. For example, Records management encompasses the design of records management systems and recordkeeping. Preservation encompasses the management of environment and curation and preservation of archival materials (see Table 3).

The triad of Knowledge, Skills, and Competences proposed by the European model is implemented at this level, applied to each of the archival activities identified in Table 3.

TABLE 3.
Qualifying Archivists: Functions and Activities

Function	Activity
1. Records management	1.1 Designing the records management system 1.2 Recordkeeping
2. Protection	2.1 Monitoring and safeguard 2.2 Inspection
3. Appraisal and disposition	3.1 Appraisal 3.2 Disposition
4. Arrangement and description	4.1 Arrangement 4.2 Description
5. Preservation	5.1 Managing the environment 5.2 Curating and preserving archival resources
6. Design and appraisal of information systems and applications	6.1 Design 6.2 Appraisal
7. User services	7.1 Definition of terms for user services 7.2 Reference service 7.3 Distance service 7.4 Reproduction services 7.5 Dissemination of information about archival holdings
8. Promotion, training and education	8.1 Promotion 8.2 Training and education
9. Research	9.1 Scientific research 9.2 Editorial activity
10. Management and administration	10.1 Management of archival holdings 10.2 Management of human resources 10.3 Management of union relations 10.4 Management of financial resources 10.5 Management of facilities 10.6 Management of contracts for supply of archival services

We will present here only a few such activities, in order to illustrate how the activities could be modeled on the basis of the European model.

"**Designing the records management system**" (1.1) is an activity aimed at identifying and organizing in a systematic way criteria, tools, agents, processes and – more generally – all the relevant aspects of a records management system (see Table 4). When designing a records management system, archivists cooperate with information technologists in order to a) implement records management principles, methods and tools within the information system; b) integrate the records processes and workflow within the broader organization's information system; and c) identify hardware and software solutions that best meet the specific organization's needs.

The archivist's expertise can be exerted at any stage in the design process, because they provide specialized knowledge and abilities required to interpret and translate the organization's needs according to the archival methodologies, through the creation of classification and preservation plans, records management guidelines, indexes, thesauri, and any tool for records management. All solutions (e.g., classification plan, preservation plan, procedures) are driven by principles and methodologies having general validity, but

they need to be put in the specific context and harmonized in order to create a consistent records system.

TABLE 4.
Designing the Records Management System

Competence	Skill	Knowledge
Organizing records flow	• Define records flow, identifying actors, objects and functions of records system • Define procedures, identifying criteria, methods and responsibilities related to each function of the records system • Define the metadata needed to perform records management functions • Define security and access levels to functions and objects of records system • Define roles and responsibilities associated with records management processes • Identify creators' business processes and organize records flows accordingly • Optimize creators' business processes • Interpret and make use of laws and regulations, archival principles, and national and international standards to design the records system	• Archival theory • Foundations of diplomatics • Elements of physical organization and storage of archives • Principles, methods and techniques of records management • Principles of organizational theory • Elements of informatics • Elements of data modeling • Elements of knowledge organization and representation • National and international standards on records management • Basic law • Elements of administrative law • Laws and regulations on records creation, management and preservation • Laws and regulations on electronic records creation, management and preservation • Laws and regulations on classified records, privacy, secrecy, and administrative process transparency
Defining classification plans	• Identify creators' functions, activities and subjects • Organize the whole system of creator's functions, activities and subjects into a classification plan	
Defining aggregation criteria	• Identify creators' functional requirements with regards to series, files, subfiles and other aggregations • Define criteria to organize documentation into series, files, subfiles and other aggregations, integrating the resulting criteria into the classification plan	
Creating lists, indexes and thesauri	• Identify criteria to create lists • Identify terms for a controlled vocabulary, according to some criteria • Organize controlled vocabulary terms	
Creating preservation plans	• Analyze and interpret a classification plan • Analyze the ways in which documentation sedimented • Verify the existence of specific document types that need specific preservation strategies • Schedule records (i.e., determine their retention period and describe disposition actions)	
Creating record management guidelines and tools	• Analyze the creators' complete records management system, in order to identify its features and criticalities • Create a manual where information about functional and operational aspects, terms, laws and regulations, and any other relevant information about the records management system is provided in a systematic and consistent fashion, so to give a complete and detailed representation of the records management system • Design specific records management tools according to the creator's specific functional requirements	

"**Recordkeeping**" (1.2) refers to all activities of creation, maintenance, treatment, use and disposition of records (see Table 5). Recordkeeping requires a professional archivist for the organization, direction and control of all operations needed to manage records in their active and semi-active stages (current and semi-current archives). Recordkeping activities are performed by archivists with diverse yet specialized levels of expertise and responsibility.

TABLE 5.
Recordkeeping

Competence	Skill	Knowledge
Registering	• Analyse and interpret records in order to identify and register relevant records metadata needed through different stages of records' life • Register relevant metadata needed to handle and manage records into the relevant system	• Archival theory • Foundations of diplomatics • Elements of physical organization and storage of archives • Principles, methods and techniques of records management • Elements of informatics • Elements of knowledge organization • Relevant requirements of a records management application • National and international standards on records management • Laws and regulations on records creation, management and preservation
Assigning a classification code	• Analyse and interpret a classification plan • Analyse and interpret records in order to associate them with their pertinent classification code • Identify and register the classification code associated with a record	
Aggregating	• Interpret aggregation criteria • Interpret records in order to associate them with their pertinent aggregation • Assign a title to a new archival unit • Update a file list and other records management tools	
Handling	• Interpret a map of the archival holdings • Retrieve an archival unit from the archives or place it in the archives in its correct location • Record information about charge and discharge of an archival unit	
Monitoring and updating records management tools	• Monitor records management tools over time to ensure they meet the requirements of the juridical, institutional and operational context • Identify the issues related to records management tools and their implementation • Define improvement strategies for records management tools	
Organizing and managing semi-current archives	• Plan and coordinate documentation transfers from current archives to semi-current archives • Interpret a map of the archival holdings and organize transferred documentation, linking it to related materials already acquired by the semi-current archives • Organize charge and discharge of documentation • Plan and manage documentation transfer from the semi-current archives to the non-current archives • Plan and manage appraisal and disposition activities	
Auditing records management system	• Identify criteria and/or metrics to assess the performance of a records management systems, or some of its functionalities • Verify the performance of a records management system on the basis of some predefined criteria • Evaluate the results of a performance assessment	

"**Arrangement**" (4.1) is the whole of the activities aimed at studying records creators in their historical, political, administrative and social context, with particular attention to their functions and powers; use and reuse of records over time; and processes of sedimentation and transmission of documentary sources (see Table 6). Such study aims to identify the original structure of the body of records that is under investigation, highlighting the internal relations and arranging – at least virtually – the archival units on the basis of such structure. In other words, arrangement requires understanding of the underlying logics of a body of records. Archivists should be able to arrange documentation of any age – from the Middle Ages to the present day – and any format.

TABLE 6.
Arrangement

Competence	Skill	Knowledge
Investigating documentation and its historical/institutional context	• Analyze transfer lists, disposition minutes and any previous finding aids • Investigate the sedimentation process of the body of materials in order to reconstruct its history • Analyze documentation from a diplomatistic point of view in order to get useful elements to reconstruct the original order • Make a deep historical-juridical investigation of records creators • Make a historical investigation aimed at contextualizing records creators activities	• Archival theory • Palaeography and diplomatics • Principles, methods and techniques of archival arrangement • Medieval, modern and contemporary history • History of medieval, modern and contemporary institutions • History of ecclesiastic institutions • Foundations of private and public law
Arranging documentation logically and/or physically	• Identify the structure of the body of archival materials on the basis of archival principles, pointing out its internal structure • Arrange archival units logically, on the basis of the structure identified • Arrange archival units physically, on the basis of the logical structure identified	
Physical maintenance	• Change folders or coordinate change operations • Record relevant data on the folder label or the registry	

"**Description**" (4.2.) refers to all activities aimed at collecting, analyzing, organizing and recording information that supports identification, management, location and illustration of archival material along with its context of creation, use, transmission and preservation (see Table 7). Traditionally, the outcome of the description activities is a finding aid. There are different types of finding aids, based on the reasons for their creation (guides, inventories, lists, etc.).

The creation and maintenance of a records management system or a long term preservation system require activities aimed at collecting, organizing and recording information on the records as well as on their context. Therefore, description activities are carried out in the course of records management and preservation processes, in a dynamic manner.

Similarly, archival information systems bring the functionalities of traditional finding aids to the digital environment, allowing for new and more granular access to records: as a matter of fact, archival information systems are the outcome of description activities.

Description can be carried out at different levels, with different degrees of detail and accuracy, with different purposes. Each body of records, at any time created, requires a specific treatment as it regards arrangement and description, which is in itself an autonomous scientific project.

TABLE 7.
Description

Competence	Skill	Knowledge
Planning a systematic and comprehensive description of the body of materials	• Identify objectives and methodology of the description project • Identify criteria to select body of materials • Identify the structure and the features of the description project	• Archival theory • Palaeography and diplomatics • Principles, methods and techniques of archival description • National and international standards on archival description • Medieval, modern and contemporary history • History of medieval, modern and contemporary institutions • History of ecclesiastic institutions • Foundations of private and public law • Elements of knowledge organization and representation • Elements of data modelling • Relevant requirements of an application program for archival description
Identifying description elements	• Evaluate objectives of the description project • Evaluate characteristics of documentation • Evaluate pertinent national and international standards • Evaluate user needs • Define level and granularity of description • Define description elements	
Describing the methodology	• Describe objectives and methodology of the description project • Describe results of the implementation of the methodology • Describe creators and duration of the description project	
Describing the body of materials	• Describe the body of materials and the related context of creation, use, sedimentation, custody and preservation, on the basis of archival principles and description elements identified • Describe the body of materials according to their physical location	
Reviewing descriptions	• Check completeness, and semantic and syntactic correctness of descriptive data • Supplement descriptive data as necessary • Convert descriptive data from one description system to another	
Creating auxiliary tools	• Create indexes • Create glossaries • Create calendars • Create lists • Create bibliographies	

"**Managing environment**" (5.1) is nested within the preservation function. It is the whole of activities aimed to design and implement appropriate solutions – with relation to building, plant engineering and instrumentation – for the preservation of records (see Table 8). The management of environmental conditions requires the archivist to collaborate with other professionals with specialized skills in different areas, to both design and implement protective and safety measures.

Archivists are critical in the design phase, when they can identify the best solutions for the location of the premises (reference room, back office, storage facilities, etc.), for the

furniture and equipment, and for any requirements to ensure compliance with the implementation of existing legislation. The implementation of environmental conditions requires the constant presence of the archivist, whose task is to organize the maintenance, monitoring and updating of environmental conditions.

TABLE 8.
Managing Environment

Competence	Skill	Knowledge
Designing the environment	• Identify appropriate locations for work and user service • Identify measures and strategies to eliminate architectural barriers for the handicapped • Identify measures and strategies to implement proper climate and environmental conditions for preservation • Planning the implementation of fire suppression systems, fire alarms, smoke alarms and similar devices • Identify measures against breaking and entering • Identify measures for energy saving • Identify safety measures • Select proper shelves, facilities and containers for preserving documentation • Identify measures for monitoring environmental conditions	• Archival theory • Principles, methods and techniques of preservation • Laws and regulation on archives, preservation and digital records • Laws and regulation on energy saving • Laws and regulation on safety in work environments • National and international standards on preservation
Implementing environmental conditions	• Provide directions to technicians when implementing building and plant-engineering solutions aimed at supporting preservation • Supervise implementation of measures aimed at guaranteeing proper environmental conditions • Supervise the construction of facilities and the implementation of equipment, systems and tools aimed at preservation • Organize maintenance, monitoring and updating activities	

"**Curating and preserving archival resources**" (5.2) refers to the preservation function. It is all the procedures, policies and strategies aimed at ensuring the curation and preservation of records on whatever media as well as preventing damage and ensuring safety (see Table 9). Preservation is a core mission for archivists, and as such exemplifies their identity. However, the complexity of this activity may determine the need for specialization in specific types of records (e.g., photographs, audiovisual material, financial records, health records).

Archivists need to cooperate with other professionals for the management of safety measures and emergency plans, without prejudice to their responsibility as those who run the archival service and the need for training of personnel on these topics.

TABLE 9.
Curating and Preserving Archival Resources

Competence	Skill	Knowledge
Managing space	• Plan and monitor use of space • Plan cleaning and maintenance of spaces	• Archival theory • Principles, methods and techniques of preservation • Elements of Chemistry • Elements of theory and practice of restoration • Elements of Informatics • Elements of operational planning • Laws and regulation on archives, preservation and digital records • Elements of administrative law • Laws and regulations on archives • Laws and regulations on digital records • Laws and regulations on transparency, privacy, classified records, secrecy, copyright • Laws and regulations on safety on work environments • National and international standards on preservation
Managing containers	• Plan requirements for various types of containers • Plan maintenance and monitoring of containers • Plan substitution of obsolete or damaged containers, along with updating any attached labels	
Managing preservation processes	• Plan cleaning and decontamination of documentation • Plan restoration of documentation • Plan operations aimed at identifying and cataloging materials needing for restoration • Select bids and external operators for restoration activities • Evaluate the restoration activities • Plan and implement copying activities • Identify diverse preservation actions, based on support, format and type of documentation, objectives, use and other relevant features • Plan and implement maintenance and migration of digital records • Create a preservation manual to describe strategies and procedures on preservation in a systematic way • Implement the preservation manual • Manage movement of rare and ancient materials • Plan monitoring of materials aimed at evaluating preservation conditions • Plan maintenance of the preservation system • Plan and/or implement audit of preservation system	
Managing emergency plans	• Provide directions to technicians when designing the disaster recovery plan • Provide directions to technicians when designing the emergency plans • Plan and organize emergency training courses • Supervise emergency actions • Create disaster reports • Review the disaster recovery and emergency plans	

As stated above, the standardization process has been completed: the whole scheme, accompanied by the explanatory notes, has been issued in July 2014 as the Italian standard UNI 11536:2014. Far from being just the end of the development process, the formal issue has moved the standardization initiative to the next stages. The scheme presented here needs ongoing refinement: no standard is perfect, and this too needs to be refined and amended in order not only to make it better but also to keep it updated with the ongoing evolution of archivist's identity, which is shaped by the unceasing change of objects, tools and users[5].

[5] Technical standards are continuously monitored. They must be reviewed every five years at most, as part of the standardization process. In particular, UNI 11536 must be reviewed every three years, as established by UNI for any standard defining a professional profile.

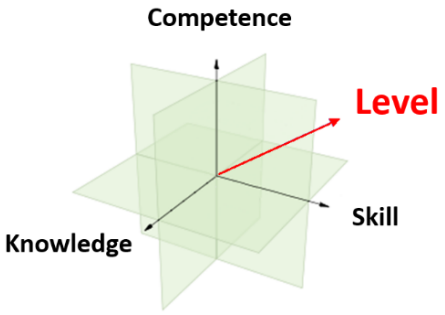

FIGURE 4.
The EQF Model: Level As a Further Dimension

In particular, the levels need to be refined. For practical reasons, archival activities have been qualified as being at the 6th and 7th level, i.e., the highest levels of the European Qualifications Framework. However, such a general statement needs for further refinement: all the different activities identified in the scheme may be associated to either level; rather, a wider range of levels may be adopted, so that a specific activity – thought as a combination of proper knowledge, skills and competences – may be assigned to a level ranging from the lowest to highest levels of the European model. This may help identifying different levels of responsibility, and different roles in the archival domain, which in turn may support a richer eco-system of agents performing archival activities, providing the basis for a more dynamic market of cultural professions.

The scheme may also be refined through cooperation with different actors in the same arena (for example, librarians, museum curators, information technologists, communication experts) in order to create a consistent and integrated framework where different professional figures may act being aware of each one's competences.

Finally, the Standard needs a solid and well-organized publicity campaign aimed at promoting it throughout the national community as a relevant tool which supports the shaping of the archivist's identity: the Standard can be used not only by professionals, to raise awareness and facilitate communication between archivists and customers, but also in the educational domain, where it may be used to redesign scopes, objectives and curricula of archival courses and programs.

Standards are indeed valuable as technical tools *per se*, but their fundamental value lies rather in their capacity to raise awareness and issues, and bring the community to discussion. Standards are a way by which a community – the archival community – identifies itself. As pointed out by Susan Davies (2003), codification of professional knowledge and development of standards through which that knowledge is applied, is a fundamental step in the professionalization process that leads an occupation to develop coherency as a group. However, we should be aware of the political nature of standards: to borrow words from Jeris and Johnson (2004), "standards, once developed, find their way into practice through certification of people and processes, through accrediting agencies (public and private) for all sorts of educational programs, and through qualification examinations and licensure requirements. The commodification of competences privileges the KSA (knowledge, skills and attitudes) worldview, and turns

[..] somewhat flexible concept[s] into a rigid sorting mechanism that may have grave consequences for marginalised groups."

Therefore, caution should always be used when handling standards and trying to implement them. This holds true for the standard illustrated in these pages too: the model should be implemented *cum grano salis*. Everything looks like a nail to the man with a hammer: do not take this model as a hammer.

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He works actively in the standardization area: in the Italian Standards Organization (UNI), he is the Chair of the Subcommittee "Archives and Records Management," Vice-Chair of the Technical Committee "Documentation and Information," and Coordinator of the Working Group on the Professional Archivist's Profile. He is also the Italian representative in a few ISO Working Groups on Records Management.

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