

**The development of electronic cataloguing at the National Bank of Greece
Historical Archive: Problems of converting manuscript card indexes and
typewritten inventories to electronic finding aids**

It is obvious today that an extraordinary shift has taken place in recent years concerning the archival work and that this shift is due to the use of computers. Through the use of Automatic Data Processing many functions of archival work have been made more efficient and optimized for the description of documents and the preparation of finding aids, for cataloguing, for the administration of the shelving process, for the conservation and preservation of documents, for the preparation of publications, for issuing of archival documents in the reference room, for the issuing of indexes of users, etc. (Volker Trugenberger, Janus 1993.2). Dorothy Johnston (Dorothy Johnston, Journal of the Society of Archivists, April 2001) in her article (poses the question) asks if the use of Information Technology is simply a development in procedures replacing traditional forms of publication with new media, or if the use of I.T. raises more general issues about how we structure and describe archives? Does it speed archival procedures and are the needs of users met by the changes?

M. Cook, journal society of archivists vol.16, No1, 1995)The idea that there should be description standards, comparable with the cataloguing rules of the library world is not new to archivists. There were attempts to set them before the appearance of the computers before and after the second world war. The impulse seemed to have died away, until the arrival of computers that gave rise to this revival of interest (M.Cook)

Hugo L.P. Stibbe. Automation arises the need for standards of archival description. In 1980s, as a result of automation studies and systems design, and attempts at implementing such systems for description of archival holdings in major archival repositories, particularly in Canada and the United States, a general lack of consistency in archival descriptive practices was revealed. Automation demands consistency in approach and procedures in the functions to be automated. Archivists had not paid much attention to this requirement for large scale automation projects.

Another issue which was mentioned relating to the need of standards was the exchange of archival descriptive information between repositories. Even

though archival materials are considered to be unique, major copying projects, using microfilming and other copying techniques make for the existence of multiple copies of holdings in archival repositories. The scattering of archival fonds among multiple archives or among countries, etc was also seen as a reason for standardizing descriptive information so as to make re-describing material belonging to the same fonds, or copies of these, no longer necessary and to enable collocation, I.e, the bringing together, of parts of fonds of the same provenance possible in union listings or finding aids, such as institutional, regional or national finding aids. This latter issue is becoming more relevant and pressing when archival repositories are making their holding accessible on-line on the internet in the form of descriptions representing those holdings. Mention was also made of the archives of former colonies located in repositories of their former colonizers. Such archives have been extensively copied by the repositories of the colonized country or by cooperative projects between the two or other interested parties. The descriptive information of the copied material should not have to be redone. It should be made possible to exchange the information or transfer the descriptions in a standardized form with the copied material Important assumptions made by the Statement and which must be kept in mind when examining the IDAD(G) and the ISAAR(CPF) are stated in the preface of the Statement The Commission recognizes that the elements of information about archival material are required at each stage of its management(that bis during the entire life cycle of the documents if the material is to be on the one hand securely preserved and controlled by the custodian, and on the other hand made accessible at the proper time to all who have a right to consult it. That archival description in the widest sense of the term covers every element of information no matter at what stage of management it is identified or established that at every stage the information remains dynamic and may be subject to amendment in the light of further knowledge of the archival material and its provenance and that computerized information systems in particular may serve to integrate or select elements of information as required and to update or amend them.

The description serves as the definitive representation of the archival material which is required to establish intellectual control over it and promote access to the information which it contains This means that the Commission has taken its stand at a point after the archival material has been selected for permanent preservation and arranged. The Commission further recognized that especially in view of the of the increasing complexity of administrative structures, an explanation of the

context in which the material was created is an important aspect of archival description

Archival description Creation of an accurate representation of the fonds and its component parts by the process of capturing, collating, analyzing and organizing any information that serves to identify archival material and explain the context and records systems which produced it.

Fonds All of the documents, regardless of form or medium, naturally generated and/or accumulated and used by a particular person, family, or corporate body in the conduct of personal or corporate activity.

Also the distinction which is made between description and access points is something new to archives and archivists, at least in the usage of the terminology associated with the concept. Access point A name term, etc, by which a description may be searched identified and retrieved

Assumed here is that access points are under authority control

The Commission emphasized that all archival description is fundamentally description of collectivities of material and that these collectivities may be organized in sub-collectivities, which may be further subdivided, etc. Such organization is called arrangement and it is done on the basis of the principles of provenance and original order These units of description, being divisions and subdivisions of the whole collectivity called a fonds, naturally have a hierarchical structure, and group themselves into hierarchical levels that have as a common characteristic the structure of a tree. Figure 1 Model of levels of arrangement of a fonds

Rules of multilevel description

Access point

As a result of the work on the ISAD(G) and the comments received on the draft, the commission realized that it had only half a standard. The ISAD(G) is a standard description for the archival records or documents. Many of the comments pointed out that archival description is the sum total of description of the documents and the creators of the documents. The ISAD(G) does not adequately cover the latter. Thus the commission decided to take on as its next project a standard description for creators of archival fonds and, at the same time, tackle the as yet unfamiliar topic for archivists of authority control for the names of those creators. The ISAAR (CPF)

International Standard Archival Authority Record for Corporate Bodies Persons and Families is the result of that effort.

The difference between the two standards ISAD(G) and ISAAR(CPF) is that the first captures information about records (describes the archival materials) and the latter captures information about the creators of those records (describes the persons, corporate bodies and families that created records). The ISAAR(CPF) calls this contextual information. Archivists have always seen the need to capture contextual information because the records of which they are primary source records. Such records cannot be understood very well without knowing the context of their creation: who created the records, what kinds of functions (businesses, roles and responsibilities of government, church or private corporate entities) caused these records to be created, their associated activities, the administrative and documentary processes, etc. Unlike works such as books, archival records are not self documenting. Thus, the ISAAR(CPF) tries to identify elements of description which capture this sort of information. The ISAAR(CPF)'s main anchor is the name of the creator in a standardized form. The ISAAR(CPF) calls the name of the creator in a standardized form an authoritative name or authority entry. All of the information that is captured for the creator entity in the elements outlined in the ISAAR(CPF) and including the authority entry, is called the authority record for the creator entity. Why do we need authority entries? They are needed when we wish to use these names as access points. Access point A name, keyword, index term by which a description may be searched, identified or retrieved.

How one creates an authoritative name or authority entry, is left to national or institutional conventions or rules. It is obvious that the ISAAR cannot possibly handle or give instructions on all different ways archival institutions or national conventions create indexes. Indexing is a science. The general lay-out of the ISAA reflects the organization of the information needed for both capturing the authority entry portion and the contextual information. This information is followed by notes which document the information given in the record. Thus the authority record is made up of three main area of information as follows (stibbe).

(M.Cook, 1995) Rules for Archival Description (RAD) Canadian standard is an impressively well organized system. RAD owes a great deal to the library tradition, but has assimilated it well. From the point of view of a working archivist, RAD looks rather formidable, consisting of a closely interlocked system of

rules and conventions that govern every element of a description from punctuation upwards. To operate these rules requires a formal training, and a complete set of reference tools. The question of the fundamental level of management: The intervention of Australian colleagues (in particular) led to considerable debate on the principle of the primacy of the fonds. They recalled the long-standing tradition, deriving from the work of P.J Scott in which for practical purposes the class series is taken as the basic unit of management. Classes (Series) are relatively stable units in an administrative system, and they tend to be the ones that produce most archival material. If class descriptions are not placed below related group descriptions some way must be found to explain how they are related to the various groups that might have claims on them. On the other hand Italian colleagues requested that this hierarchical table should be extended upwards, to provide broader categories above the fonds. They asked for super-fonds which would allow the linkage, for management and for description of different fonds that have some common characteristic. Cook) ISAD has a general rule on what constitutes a minimum description, for the purposes of international data exchange. It is all the data elements of the identity statement area(reference code, title, dates of creation of the material, size and extent, and a note of the level of description. Guidelines for setting group were also discussed. There was originally an idea, that groups (fonds) should be large and few. Most archives consider that size is not a criterion for deciding what is a group. It is a better practice to look at the character of the creating body. If this body has had enough independence, or distinct character, to act on its own within its own sphere, then it should probably be regarded as the source of the fonds. There is sometimes a difficulty in applying the group concept to the archives of individual persons or of families. The same criteria apply, and if there is doubt, then the better policy would be "more and smaller". There is no restriction on the number of groups that can be held in a repository, and indeed it is quite customary in British practice for there to be a large number.

Administrative instability is the shorthand term for situations where the structure of a creating organization is frequently changed. The real functions of the organization tend to continue despite these management changes, so that it is common to find series continuing to accrue despite the fact that they have been moved from one controlling authority to another. A series may be listed under the heading of fonds that has become quite inappropriate. Cook In order to create Access points there have to

be rules governing which terms may be used. This generally means that there must be a list of acceptable terms, plus a procedure for adding new ones (or revising existing ones) without losing the authoritativeness of the list. The implications of this are quite far-reaching. It means that, eventually at least, there will have to be authority files for forms of record, the creators of groups, and, more generally, names, places and subject terms. There will also need to be some organization that has the responsibility for maintaining these authority lists, and a system for regular consultation on developing them. (Cook 1995)

1. Authority Control area
 - 1.1 Identity code
 - 1.2 Type of Archival Authority Record
 - 1.3 Authority entry
 - 1.4 Parallel entry/entries
 - 1.5 Related authority entry/entries

2. Information area
 - 2.1

- 3.

stibbe

The conversion of manuscript or typescript catalogues and card indexes to computer based finding aids may be a difficult task or an easy and straightforward one. This depends on the quality of the previously existing catalogues and indexes.

My paper will focus on the use of Automatic Data Processing at the Historical Archive of the National Bank of Greece.

The HA NBG

The National Bank of Greece, founded in 1841, is the oldest and largest bank operating today in Greece. It started as a private discount and mortgage institution with the exclusive right to issue banknotes.

In the year that followed, and until 1928, the bank's activities gradually expanded to commercial, agrarian and industrial credit. The Bank assumed the right to invest capital in transport services, maritime enterprises and public works. The Bank financed public works such as the opening of the Corinth Canal, the construction of roads, ports and railways. With interim loans and open accounts the bank also assisted public finance, covered the state budget deficits and subscribed to national loans. The NBG very early established a branch network and gradually expanded its activities throughout Greece and abroad by opening branches and by merging with banks that either operated regionally, such as the Bank of Epirus-Thessaly (1899), the Bank of Crete (1919) or internationally, such as the Bank of Athens which had extended its business outside the confines of the Greek state into the prosperous Greek communities of the Middle East with branch offices in Turkey, Egypt and Cyprus.

The year 1928 marks a major turning point for the Greek banking system. With the assistance of Britain the Greek banking system is reorganized. National Bank of Greece loses its exclusive right to issue banknotes, which was transferred to the new central bank of Greece, the Bank of Greece, transfers its agricultural credit to the Agricultural Bank of Greece and its mortgage credit to the National Mortgage Bank of Greece, banks specially founded for these reasons.

Over the course of its 165 year history, the bank's activities gradually expanded to encompass the full range of credit and financial services. Lately the bank developed the National Bank of Greece Group, which, besides playing an essential role in the domestic economy, today constitutes a Major financial force in the Eastern Mediterranean and the Balkans.

The Historical Archive, National Bank of Greece (H.A./NBG)

Since its foundation, in 1841, National Bank of Greece has always been aware of the importance of the preservation of its records.

In an organization chart drawn up just the second year of the Bank's operations, Georgios Stavros, the Governor of the Bank at the time, specifically assigns responsibility for the proper maintenance and safe keeping of the records of the Bank.

Indeed, the Bank's concern for the safekeeping of its archives is apparent from a number of initiatives taken by the Bank over the 165 years of its history. For instance, in 1894 NBG published an inventory of its general archives, and

in 1925 it build the first purpose-built archive in Greece. NBG's desire to make full use of its extensive archives for historical reasons was made clear from 1938 onwards. In 1938, as part of the Bank's preparation for its upcoming centenary celebration in 1941, the decision was taken to create a separate Historical Archive Department in addition to the existing General Archive Department. The Second World War postponed all actions related to the decision to establish the Historical Archive. The year 1962 marked a turning point for the archives of the Bank in respect of both operational needs and the preservation of documents of potential historical interest.

The Historical Archive Service was set up again. The mission of the new Service was to assemble accounting books and documents illustrating the development of the Bank over the years and to classify and inventory them properly so that they may serve as sources or reference for historical monographs and other study projects. The work of the Historical Archive was suspended once more following the 1967 military coup, but the department was brought back into service in 1977. The fall of the dictatorship marked the beginning of an era of prosperity for the Bank's archives which lasts to this day. The Historical Archive was assigned with the tasks of modernizing the management of the records within its jurisdiction (1841-1940) and of ensuring that the records in its possession were made fully available to interested academics.

Today the Historical Archive is an independent Subdivision of the Bank which reports directly to the President of the Bank.

The archives of the Bank have always been among its priorities. However, the importance placed on the archives in an age prior to the emergence of the modern concepts of archive management and utilization indicates an increased awareness reflecting the presence of an "archive culture", at least among NBG's management. Information contained in the archives of the Bank was considered to have fundamental and continuing information value for the documentation of economic, political, social and cultural events of historical importance.

The main task of the H.A. was to implement an archival preservation program to ensure adequate protection of the records of the Bank whatever their date, form or appearance, which are no longer in service, i.e. have ceased to be needed for current business. These records were preserved, either as evidence of origins, structures, functions and activities or because or because of the value of the information they

contain for access by present and future generations of researchers and academics. Archives document human experience and serve as civilization's collective memory. By safeguarding the archives of the Bank, the Historical Archive safeguarded a part of the country's cultural heritage. The documents of NBG are extremely important for the economic, social and political history of Greece since the Bank is not only the largest bank operating in the country but was also, until 1928, the "central bank", administering all the finances of the Greek state. The executives of the Bank admitted that the archives should be accessible to the public for research purposes, thus making their preservation meaningful.

The use of Computers: Creating powerful information retrieval tools for archivists and researchers

Since archives exist in order to store and retrieve information they are appropriate for adaptation to computer methodology.

The developments in data and network technologies, with their constantly improving capacity to store, retrieve and transmission of document images, opened the way for new forms of uses of the archives which we realized needed to be incorporated into our Archive preservation program.

In 1996, the Historical Archives decided to take in consideration the evolution of computer technology and the possibility of using Electronic Data Processing in archival operations. We asked our collaborator on information technologies at the time, Mr. G. Mitrofanis, to investigate the problem, in collaboration with our archivists, and to prepare a report on the advantages and disadvantages of each technological solution presented.

The report, which took into consideration international research on the subject, was submitted a few months later and concluded that the Historical Archive should computerize its archival operations. The report added that “the system should be capable of operating in a local computer network supporting the electronic processing of the whole range of in-house archival operations: access, classification and description, inventory control and retrieval of archival material. The design of the system’s databases and tables should comply with internationally accepted standards for archival description, the General International Standard Archival Description, ISAD (G) developed by the International Council on Archives Committee on Descriptive Standards. The system should support the production and dissemination for digital images of primary archival material. The system should secure the authenticity and safety of the disseminated digital images. The system should allow the compilation and maintenance of electronic search aids. These search aids should link to digital images of primary archival material. The system should provide access to finding aids, and correspondingly to the digital images of the original archival material, by means of a common end-user interface”¹.

¹ George N. Mitrofanis, “Encoded Archival Description (EAD) and the dissemination of historical information. The application of EAD in the National Bank of Greece Historical Archives. Proceedings of the DLM-Forum on electronic records. European citizens and electronic information: The memory of the Information Society, p.271-279

Application of the General International Standard of Archival Description

The first step was to adopt and adapt the rules of the General International Standard of Archival Description to the needs of the Historical Archives of the National Bank of Greece. The purpose of archival description is to identify and explain the context and content of archival material in order to promote its accessibility. This is achieved by creating accurate and appropriate representations and by organizing them in accordance with predetermined models. Specific elements of information about archival materials are recorded at every phase of their management (e.g., creation, appraisal, accessioning, conservation, arrangement) if the material is to be on the one hand securely preserved and controlled, and on the other hand made accessible at the proper time to all who have a right to consult it. Archival description in the widest sense of the term covers every element of information no matter at what stage of management it is identified or established. Computerized information systems in particular may serve to integrate or select elements of information as required, and to update or amend them. The set of general rules for archival description is part of a process that ensures the creation of consistent, appropriate, and self explanatory descriptions, facilitates the retrieval and exchange of information about archival material enables the sharing of authority data and makes possible the integration of descriptions from different locations into unified information systems. The Archival descriptive standards are based on the theoretical principle that archival description proceeds from the general to the specific which is the practical consequence of the principle of the respect des fonds. The hierarchical model of the levels of arrangement for the fonds and its constituent parts is shown in the following diagram. Each level corresponds to a description with differing degree of detail appropriate to each level of arrangement.

The description of each level is divided in seven areas of distinctive informations

1. Identity statement area
(where essential information is conveyed to identify the unit of description)
2. Context Area
(where information is conveyed about the origin and custody of the unit of description)
3. Content and Structure Area

(where information is conveyed about the subject matter and arrangement of the unit of description)

4. Condition of Access and Use Area

(where information is conveyed about the availability of the unit of description)

5. Allied Material Area

(where information is conveyed about materials having an important relationship to the unit of description)

6. Note Area

(where specialized information and information that cannot be accommodated in any of the other areas may be conveyed)

7. Description Control Area

(where information is conveyed on how, when and by whom the archival description was prepared.

Multilevel description rules

2.1. Description from the general to the specific.

Purpose: To represent the context and the hierarchical structure of the fonds and its parts

Rule: At the fonds level give information for the fonds as a whole. At the next and subsequent levels give information for the parts being described. Present the resulting descriptions in a hierarchical part-to-whole relationship proceeding from the broadest (fonds) to the more specific.

2.2. Information relevant to the level of description

Purpose: To represent accurately the context and content of the unit of description

Rule: provide only such information as is appropriate to the level being described. For example do not provide detailed file content information if the unit of description is a fonds; do not provide an administrative history for an entire department if the creator of a unit of description is a division or a branch.

2.3 Linking of descriptions

Purpose: To make explicit the position of the unit of description in the hierarchy.

Rule: Link each description to its next higher unit of description, if applicable, and identify the level of description

2.4 Non-repetition of information

Purpose: To void redundancy of information in hierarchically related archival descriptions.

Rule At the highest appropriate level, give information that is common to the component parts. Do not repeat information at a lower level of description that has already been given at a higher level.

Elements of description

Identity Statement Area

Reference code(s)

Purpose: To identify uniquely the unit of description and to provide a link to the description that represents it

Rule: Record, as necessary for unique identification, the following elements

The country code in accordance with the latest version of ISO 3166 Codes for the representation of names of countries GR

The repository code in accordance with the national repository code standard or other unique location identifier H.A./N.B.G.

A specific local reference cod, control number etc

GR H.A./N.B.G. A1

Title

The name of the unit of description

One of the first issues we had to treat was that of the levels of description. We had to decide how many levels we would use. After studying carefully our handwritten inventories we decided that five levels of description were suitable for the description of the archival material preserved in the H.A. N.B.G (Fonds level, series level, sub-series level, files level, items level).

In the conversion of finding aids from typescript to electronic format, analysis of the structure of lists is essential, particularly their definition at the highest level. Even within natural organizational archives, which develop over time the scope of the fonds and the naming of its series and sub-series may not be easy. The problem does not lie in the definition of fonds, which archivists well understand, but in the practical difficulties which result from managing collections which grow by accrual and have

been treated to different listing practices over the decades. Elements which may be identified clearly as series can nest within sub series referencing systems. Alternatively a sub-fonds may have acquired, through a separate list and constituency of users, virtually the independent status of an archival group Examples Governors personal papers. Fonds or series. The Records of a Bank that merged with NBG should be a separate fond with its series, sub series, files. In the typescript catalogue of the archive of the National Bank of Greece edited in 1980 these records were described as series of the National Bank of Greece fonds (archive)

Their established arrangement and description presented a variety of problems which emerged from the rigorous assesment of their structures.

Free-text searching and access points

The value of indexes in accessing archival data is for some a given fact and for others a debatable point. Free- text searching undoubtedly provides a powerful form of access not possible in hard-copy guides, but the larger the files, the poorer the result will be. Irrelevant material will need to be filtered out. This is a particular problem with many thousands of item-level entries, displaying repeated elements within records where, for instance, the same people are corresponding. To be effective, free text searching demands rigorously consistent data creation Free text searching at HANBG applies to title to scope and content,

The archival and historical information system, a database program created by Ethnodata Company in 1997 to meet the needs of the Historical Archive of NBG enables us to store, organize, update, sort and retrieve a large amount of information, for a variety of purposes. By computerizing detailed information on records we have gained a better intellectual control over our archives' holdings.

So far we have stored in our archival and historical information system 310.000 files and 15.500 accounting books. If we list the records series by the amount of files already processed we have the following order of the most important in volume archival series of HA/NBG

- Legal Division 116.000 files
- Shareholders 84.000
- Private and public loans 52.000
- Industrial Credit 12.000
- Bank of Athens 11.000

• Exchangeable Property Management Division	12.000
• Audits	1.800
• Minutes of Meeting	1.700
• Branches	1.200
• Correspondence	1.700
• Personal Papers of Governors and CEO	1.400
• Agricultural Credit	1.800
• Technical Services	1700

The files of the Legal Division were transferred to the Historical Archive recently in 2002. As we estimated that these files were of great interest for researchers we decided to give absolute priority to their arrangement and description and to record the information in a computer system in order to make possible the use of these records as soon as possible and to facilitate researchers. We decided that we would not weed the files and this process could wait as weeding must take place before microfilming in order to avoid unnecessary cost of microfilming material that may be destroyed (such as routine acknowledgments, circulars, notifications, requests, duplicates or extra copies of letters, preliminary drafts of letters, memorandums and reports, informal notes etc) without losing information. Fortunately the original order of the files had not been disturbed. In order to make accessible the files of the Legal Department as soon as possible we decided that the title of the file, which nearly always includes the name of the individual or the name of the company concerned, and the dates of the records would be the only information recorded in our computer system. We have discovered that this is sufficient as researchers generally relate their enquiries to the name of a person or organization, to a particular date, to a geographical area to an event or to a combination of these.

The use of the archives is essential. Past, present, and future demand must justify retention. A long run of unique, understandable, and accessible records that will never be consulted by researchers is a bad investment of precious archival resources.

Arrangement and description

Arrangement is the process of organizing records in accordance with the accepted archival principles of provenance and original order. This means that we

first have to examine the records to determine their original order and then reorganize them into that order, which involves reboxing, labeling and shelving the records.

Description is the process of recording standardized information about arrangement, contents and formats of the records so that persons reading the descriptions are able to determine whether or not the records are relevant to their research. The arrangement and description processes produce descriptions of the records, arranged according to provenance, providing a structural view of the records. Finding aids present this information in a variety of ways supplementing it with additional information and indexes to help users find their way into the records.

The Historical Archive of National Bank has set priorities for Arrangement and Description. The key questions we had to answer setting priorities where:

1. Which collections to do first?
2. What level of detail is required?
3. How much time to spend on each collection?

We immediately realized that priorities would be different if we decided to choose to satisfy requests of the Bank related to its recent functioning or if we decided to satisfy requests of researchers searching older and more general information on the development of the Greek economy and the foundation and development of private and public enterprises.

After carefully evaluating the situation we have decided to arrange and describe the records of the Bank in the following priority, in order to satisfy both the Bank's management and the researchers' demands:

- Articles of Association -Bylaws- Organization Charts
- Personal papers of Governors and Senior Executive officers
- Minutes of Meetings
- Annual Reports
- Circulars
- Public and Private Loans
- Shareholders
- Archives of merged Banks
- Correspondence
- Branches

- Industrial Credit
- Agriculture Credit
- Bank of Athens
- Audits
- Legal Division records
- Technical Services records
- Exchangeable property management division