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The National Library of Greece: moving into a new era

Dr. Zoitsa Gkinni
Conservation Lab, National Library of Greece, Athens, Greece
E-mail address: zgkinni@nlg.gr

Christina Tsaroucha
Conservation Lab, National Library of Greece, Athens, Greece
E-mail address: tsarouha@nlg.gr

Dr. Nikolas Sarris
Conservation Lab, National Library of Greece, Athens, Greece
E-mail address: nsarris@nlg.gr

Abstract:
The National Library of Greece (NLG) was founded in 1832 and during the early years of its establishment its collections were transferred and housed in various venues. In 1903, the Library moved to an imposing neoclassical marble building at the city center that stands out as one of Athens landmarks. In 2006, the Stavros Niarchos Foundation announced its plans to fund the development of the Stavros Niarchos Foundation Cultural Center that included the construction of new facilities for the National Library and the National Opera, as well as the Stavros Niarchos Park. This significant project is now completed and the NLG, after more than a century, is ready to move once again. By fall 2017, all collections will be transferred to the new 22,000 m² facilities that provide suitable conditions and modern infrastructure for the preservation, digitization and use if its collections. Thus, in 2016, the pace of preparation for the transfer of collections has been intensified.

This paper discusses the preservation planning and actions regarding the transfer of collections. This massive endeavor includes a wide range of projects that attend to preservation, such as preparatory actions, risk assessment management, remedial and preventive conservation actions, packing and finally the transfer and reorganization of the library collections to their new facilities.

Keywords: Collection, transfer, RFID, National Library, Greece.

1. Introduction

The National Library of Greece (NLG) holds one of the largest and most important collections in the country. The General Collection includes more than 1,000,000 books, newspapers and periodicals. Its manuscript collection comprises of around 5,400 manuscripts dating from the 9th to the 19th century and is one of the largest collections of Greek manuscripts worldwide. The Rare Printed Books collection contains more than 15,000 valuable incunabula, early or rare printed books. The library also holds an important special collection of works of art on paper, maps, photographic materials, musical scores, historical archives, such as the archive of the Greek Revolution of 1821, the archive of the Philhellenic Comitatus of London and archives of important Greek personalities.

Since 1903, following numerous relocations during the early years of its establishment, , the Library is located at the city center. Its imposing neoclassical marble building (Vallianos building) has served the public and housed the majority of its collections for more than a century. However, this historical building could no longer serve the needs of a constantly developing National Library, regarding its collections, facilities and IT services.

In 2006, the Stavros Niarchos Foundation (SNF) announced its plans to fund the development of the Stavros Niarchos Foundation Cultural Center (SNFCC) that included the construction of new facilities for the National Library and the National Opera, as well as the Stavros Niarchos Park. The SNFCC is located 4.5 km south of the centre of Athens, at Faliro Bay and is designed as a multifunctional arts, education and entertainment complex [SNFCC, n.d.]. This significant project is now completed and the NLG, after more than a century, is ready to move once again.

The relocation of a Library can be a difficult and demanding project. When such a project involves a National Library, the effort spent to prepare and execute such an endeavor is massive and must be well planned and executed accordingly to be successful. Focusing on the actions undertaken by the NLG Conservation Lab (CL), three main topics are elaborated with presenting the major activities carried out over the past three years to prepare for the transfer of the collections. These topics include all preparatory actions and the treatment of the General Collection under the RFID Project, the rare books and the manuscripts. The actions presented are: Preservation planning, such as project and risk assessment management and Preservation Actions, such as remedial and preventive conservation and preparations for packing.

2. The National Library of Greece: Transfer of Collections through time

The first thoughts of establishing a National Library for the newly liberated Greek State was expressed by the Swiss philhellene Johann Jacob Mayer in an article published in the newspaper “Greek Chronicles” in August 1824. The idea was implemented by Greece’s first Governor Ioannis Kapodistrias in 1829. Since its early years the Library has moved to various locations. The “Book storage”, as it was called at the time, was originally based on the island of Aegina, near Athens. In 1832, the “Public Library” was established and in 1834, it was relocated to Athens, initially in the public baths of the Roman Agora and then in the Church of St. Eleftherios. In 1842, it was joined with the Library of the University of Athens and housed at the University’s facilities. During that period, the Public Library was enriched with significant donations and rare foreign language books from all over Europe. Finally, in 1866, the two libraries were merged, forming the "National Library of Greece".

In 1903, financed by the Vallianos brothers, a new landmark building was completed to facilitate the NLG. Designed by architect Theophil von Hansen and supervised by his disciple, Ernest Ziller, this building is part of what is known to date as the “architectural trilogy” at the centre of Athens, along with the “University of Athens” and the “Academia of Athens” (Fig. 1.). When the NLG building was completed, the Library’s collection was transferred via a wooden bridge, specially constructed for the project. After five relocations, the Library had finally found its home. For more than a hundred years the Vallianos building served its purpose and the public with its imposing reading room and stacks. However, with the collections increasing each year and the constant public demands, more storage areas and services were added in different locations. Therefore, the new 22,000-square meter premises at SNFCC will provide appropriate conditions and modern infrastructure for the storage, preservation, digitization and use of its collections. (Fig. 2, 3).

Fig. 1. The National Library of Greece, the "Vallianos" building.

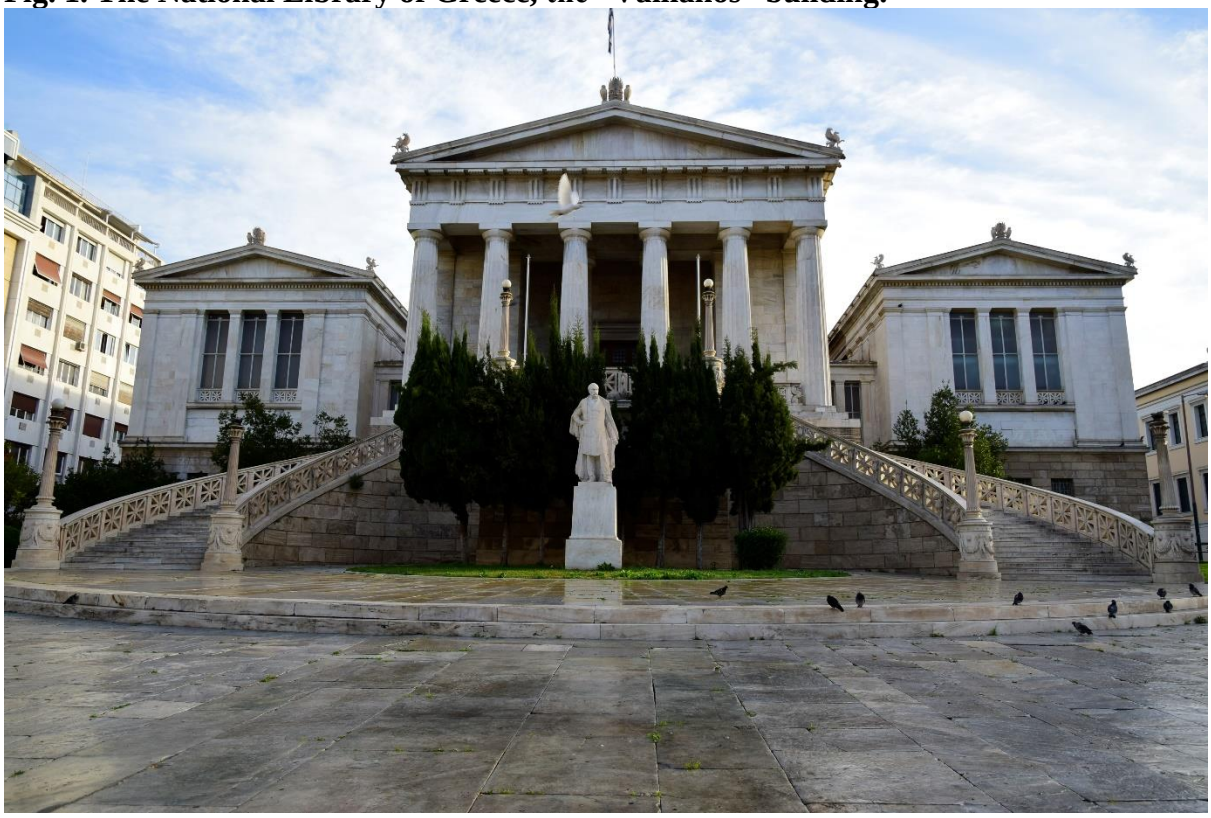


Fig. 2. The new premises of the National Library of Greece in SNFCC.

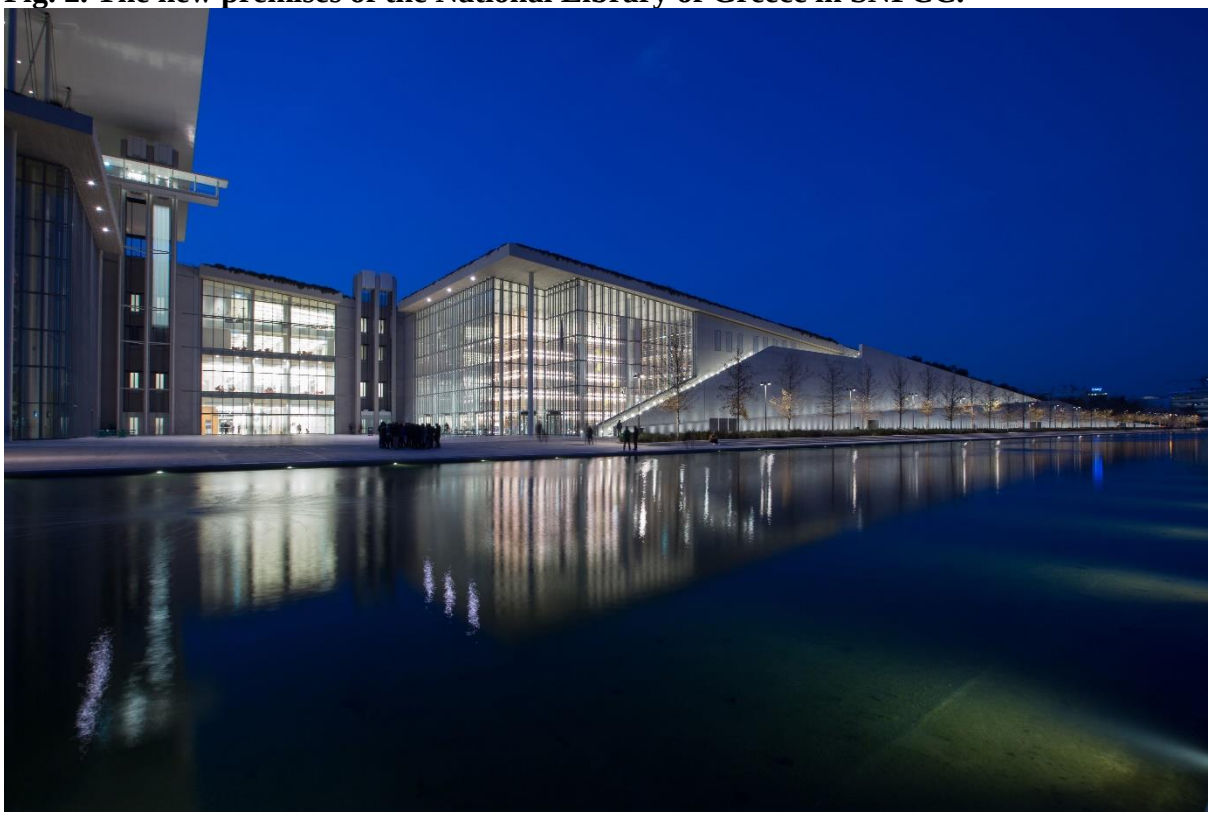
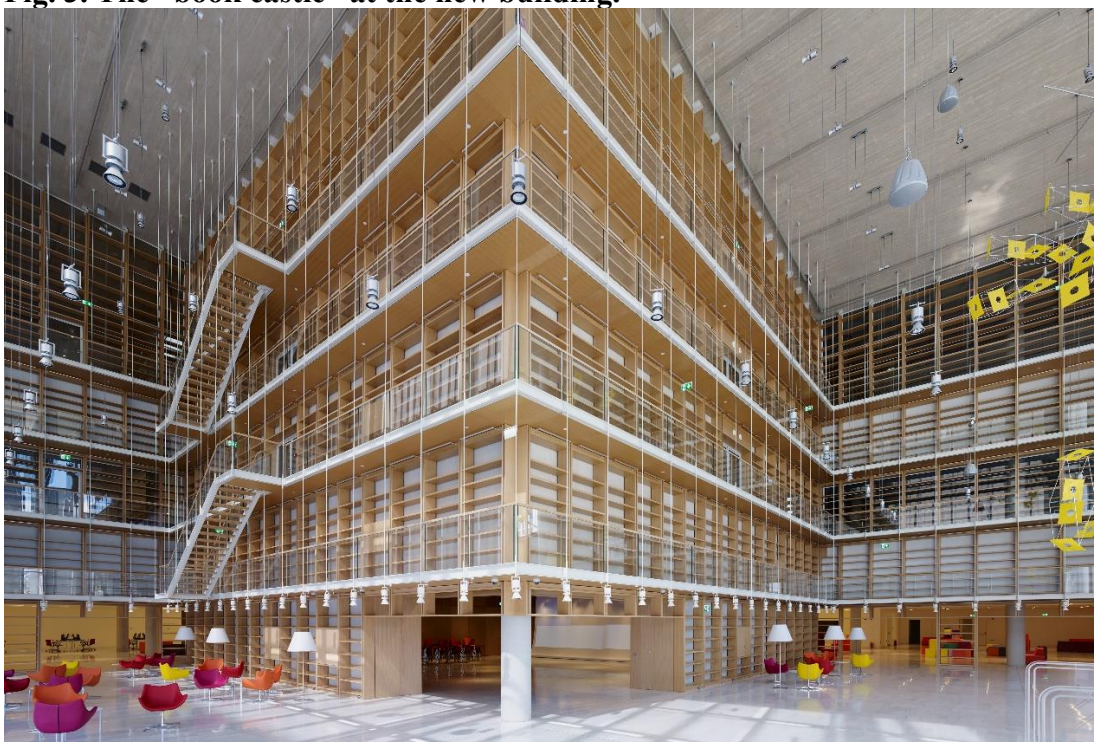


Fig. 3. The "book castle" at the new building.



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3. The Conservation Lab Actions for organizing the NLG transition

3.1. Preparatory Actions

Since 2015 the Library gradually prepares for its transition to its new premises and role. As a result, more than 40 projects are developed within five actions: 1) Transition and development of collections 2) Developing digital services 3) Designing a new lending department 4) Developing an audience 5) Training personnel. Action 1 "Transition and development of collections" relates to the preparations and the transfer of the NLG 1st copy of the general collection and the special collections, to the new premises.

The CL has participated in various preparatory actions for its transition, to upgrade its future role and scope and to facilitate the preparation of collections for their transfer. It is important to pinpoint that the actions listed below were executed along with the construction of the SNFCC.

1. Setting up the new conservation lab. The conservation team organized its new facilities by collaborating with other NLG Departments and external partners for the design and equipment of a state-of-the-art conservation laboratory and the storage areas for the manuscripts and the special collections.

2. Re-examining its role and scope. Until 2016 the Conservation team consisted of a small number of employees. The NLG transition will upgrade its activities and role and for that reason five additional conservators specialized in the conservation of books and paper were recruited.

3. Monitoring environmental conditions. From February 2015 until January 2017 an environmental monitoring project was initiated to gain an overview of the current environmental conditions within the premises of the Vallianos building. Temperature and Relative Humidity monitoring devices were installed in all storage areas, providing daily records. The data gathered provided a good insight of the storage conditions in order to prepare collections for their transfer and future storage.

3.2. Expanding the "Rare Printed Books Collection"

Until 2015, the Rare Printed Books Collection included about 5000 titles of incunabula and rare printed books which stand out for their inveteracy, rarity and their historical and artistic value. From September 2015 until June 2016, a project was executed to identify books within the General Collection and select them according to certain criteria to include them in this collection. The working team included a Book Historian[1] (external partner), a conservator and an artist. After examining the entire General Collection under a number of strict criteria, about 11,0000 volumes were added to the Rare Printed Books Collection. The bibliographical data were recorded in a Microsoft Access™ database and an acid free paper bookmark was placed in the title page of each selected book.

3.3.Cleaning of the General and Rare Printed Books Collections

Prior to the transfer of the collections it was critical to clean the General and the Rare Printed Books Collections. The cleaning project initiated in January 2016 and lasted for a year. The CL was responsible to set the specifications and instructions for external contractors regarding the equipment, materials and procedures they should follow during the cleaning project. In total, more than 750.000 books and newspapers were surfaced cleaned using vacuum cleaners installed with HEPA filters, microfibre cloths and soft brushes. The stacks were also cleaned without using solvents or water.

3.4.Setting Specifications for Moving the Library Collections

Aiming to ensure the safest and most appropriate means to carry out the complex task of moving the diverse collections of the library, the Conservation Department of the NLG was charged with the task to set the necessary specifications and guidelines for all parties involved with the move. The available international guidelines and specifications on packing, storing and moving cultural properties and library material have been advised and followed as appropriate, while taking into consideration the particular circumstances of the library and its premises. External collaborators were committed to endorse the relevant quality standards.

4. Preservation Projects for Collections Transfer

4.1. General Collection and rare books: The RFID Project

Radio Frequency Identification (RFID) is a disruptive technology that can optimize processes, facilitate traceability, guarantee authenticity, improve product safety, boost efficiency, and simplify access control. RFID is one of the emerging technologies for asset tracking, inventory management, supply chain management, payment systems, information sharing, access

[1] Professor Yannis Kokkonas, Department of Archives, Library and Museology of the Ionian University supervised the project.

control, and security, using radio waves. Industries with the greatest opportunities to use RFID include retail, aerospace, defense, health care, logistics, pharmaceutical organizations, and libraries [Randian, M. P., 2010].

After considering the potential benefits and risks of RFID tags, the Library decided to apply RFID tags to facilitate the use and transfer of the General and the Rare Book Collections, as well as to make the collections compatible to relevant international standards, improve directory quality, facilitate the use of and increase the security of the collections.

The RFID project was implemented within "Action 1: Collections' transition and development" and is a key action for the transfer of the collections. More than 80 people worked together, including the contractor and three Library Departments (Preservation, Reading Rooms and Cataloguing). The project included 4 phases, namely the:

1. application of RFID tags on books and periodicals,
2. identification in the Library system
3. processing of catalogue so that books can be retrieved.
4. digitization of 400,000 book covers and title pages, with priority to the old material.

   These pictures will appear in the OPAC online catalog along with the bibliographic record.

In addition to this project, the RFID Conservation Lab (RFID-CL) project was based on a detailed preservation plan, implemented from August 2016 until April 2017. This project included the following six actions. The first three preceded the start of the RFID project while the last three actions were performed in parallel.

1. **Setting the standards for the RFID tags**. The CL was authorised to set the standards for the RFID tags quality and application, after careful consideration of the specific needs of the collection and after assessing good practices from other libraries. Tags/labels ought to be on acid free paper and adhesive. Limitations to the application of the RFID tags were also issued. The tags were ordered in two sizes, 5x5cm and 5x7cm, and had a printed side with the Library's logo and a barcode. Upon arrival by the contractor, the labels were examined for their quality and ink stability.

2. **Making decisions**. For selected cases, the conservation team examined and proposed the preferred application method of the RFID tags, due to the fact that, from a preservation point of view, the application of tags should be done with foresight. Long term, tagging labels on books should be as consistent as possible and with the least possible impact on the structure and the materials of books.

   Moreover, it is important to abide with one of the main conservation principles, that of reversibility of the interventions and the quality of the materials applied. After examining the collection, the Conservation Lab set several criteria for selecting materials that the RFID tag should not be directly applied on. RFID tags were placed on the inner part of back board paste down, choosing among three different positions, the upper, lower and the middle part of the board. These criteria are: endpapers with hand-made paper or marble paper, embossed papers, fabrics, endpapers with inscriptions, illustrations, etc. or historic and elaborated bindings.

The second decision regarded the attachment method of RFID tags on the selected books. Various methods have already been used for attaching tags not in direct contact with the book. For example, tags could be attached on Melinex™ (jackets or pockets), on inserted archival papers as flyleaves or bookmarks, usually just before the paste down and on Japanese papers that are later adhered on the books. All these methods constituted good practices applied in other libraries upholding a basic common principle; the attachment should be secure but not in direct contact with the book [Lloyd, J., 2010].

Eventually, it was decided that a 6cm wide Melinex™ strip would be placed on the back board of the book, creating a loop with an extended end so that the label would be attached on the strip and covered by it, to protect the adjacent leaves from possible ink offsetting. The loop covers the full height of the board therefore, the contractor could easily place the tag in one of the three potential places (Fig. 4.)

Fig. 4. A book with a RFID tag on a Melinex™ strip.

3. **Writing instructions for applying the tags**. Written instructions were given to the contractor and the conservation team involved in the project. The instructions included the criteria for placing Melinex™ strips and the description of applying RFID tags on them.

4. **On the job training and knowledge transfer**

   The conservation team had daily collaboration and feedback loops with the contractor's tag application team, to avoid damages or mistakes.

5. **Preparing the collections for RFID labeling.** The conservation team worked in situ, in multiple working stations that were set in the closed stacks. The actions were performed in three stages:

   a. **Examination of collections on an item basis.** It was important to assess the condition of the collections prior to their transfer and to secure them to avoid damages during handling. It should be noted that a large-scale condition

assessment, on collection basis, had never been performed in the past. The lack of qualitative or quantitative data for the condition of the general collection was a drawback in setting priorities. The priority was to recognize early on all vulnerable material that could be easily damaged during handling and transfer. Indications of vulnerabilities were for example volumes with mechanical damages, such as detached boards, broken sewing and torn or loose covering materials, oversized items, historical and decorated bindings, brittle materials and folded items. All damaged material was secured prior to the start of the RFID project and transfer.

b. **Application of Melinex™ Strip**. On the books selected, a loop of a Melinex™ strip was attached on their back board, as described above. By the end of the project around 52,000 Melinex™ strips were attached.

c. **Preventive conservation actions.** In order to protect and support books that had excessive mechanical damages, during the examination of the collection, the conservators identified cases with traces of fungal activity. Such preventive preservation actions on collections, contribute to the design of efficient storage conditions that the new building facilities should provide. Fragile books or periodicals with severe mechanical damages or detached pages were placed in autoclaved bags. In volumes with detached boards, these were secured with cotton tape. In certain cases of oversized books or when the original boards were missing, the volume was placed between two tailor-made archival boards and secured with cotton tapes. Examining and preparing the collection was a time-consuming and laborious process, as it required work in the restricted areas of the stacks. In total, around 80,000 items were treated.

6. **Organisational and societal engagement - raising awareness**

According to the NLG's communication strategy, being open to society means that both library staff and the public in general, should be able to understand the pivotal role of the transition activities for the new set of NLG services from its new premises. Raising awareness of the activities performed during transition can raise the expectations, engagement and smooth uptake of NLG new services. By allowing NLG departments to be aware of the importance, scale and complexity of the RFID project also facilitates the smooth resource management and decision making, across the whole-of-NLG. The Conservation team shared the RFID – CL project and experiences with all colleagues from library Departments, during one of the regular, NLG internal knowledge exchange meetings. The project was also presented to the public via media coverage. This kind of publicity raise awareness for the necessity of preservation actions along with the importance of the NLG collections per se.

4.2. Manuscript Collection

The Manuscript Collection comprises of approximately 5,400 bound codices, most of which are written in Greek. The collection also includes more than 100,000 archival documents in a variety of formats, as well as a small collection of eight papyri.

The collection is currently stored in two locations occupying a total of 600m of shelving. The vast majority of the bound manuscripts and parts of the archival collection are housed inside cotton pouches. These were provided by library staff in the late 70's and were tailor-

made to the size of each individual manuscript. A codification system was devised then and was drawn onto these bags, providing key information on the type of manuscript, its format, material and general condition, which has left us with useful evidence on the state of preservation of each item at that date. Although it was an innovative form of housing and documentation for the time, these pouches have their pitfalls, as they were often sewn too tight around the manuscripts they contain, making their handling in and out of the pouches unsafe. What is more, airborne particles have accumulated over four decades has settled on the fabric. In the long term, following the move to the new premises, these pouches will be replaced.

The historic archives are stored in a variety of archival boxes, cotton pouches, non-archival folders and leather purses, some of which will also need to be replaced in the near future.

In view of the move of the manuscript collection it was decided to maintain the current housing solutions, except for few individual cases where it was deemed unsafe for the item to be moved as such. In these cases, custom made re-housing, such as archival boxes, acid free wrappers and folders were used either as a permanent storage solutions or solely to address the immediate requirements towards their move.

A moving project of a manuscript collection of this importance and size, defined the need to carry out a condition assessment of the manuscript collection as it was fundamental to build an overall estimate of the general requirements for the move of the collection to the new premises. Based on a 2014 assessment of the manuscript collection the CL initiated a project that aimed to prepare each manuscript (Fig. 5).

Fig. 5. Conservators preparing the manuscript collection.

A small team of conservators currently undertakes the following actions:

- The pouch of each manuscript was thoroughly vacuum cleaned.
- Manuscripts are cleaned externally with Museum Vac®.
- The maximum external dimensions of the manuscript were measured for calculating the spatial arrangement of the manuscripts in their new shelving, as well as for future re-housing and boxmaking projects.
- A quick assessment of the condition of the manuscript was performed to identify items with insect or mold infestation. These items are isolated and will be treated accordingly
- Select codices that should be stored horizontally.
- Re-housing or add protective wrapping with acid free tissues took.

Strict deadlines had to be met, while keeping in line with the concept of minimizing the overall amount of handling and stress that the manuscripts would undergo during the process. The transfer of the manuscript collection will be carried out on a second phase, once the preparation of the entire collection has been completed.

5. Conclusions

The last three years have been most productive for NLG, since it is preparing for its transition to a new Era. Its profile and services are upgrades and a major part of its collection is transferred to its new state-of-the-art facilities at the SNFCC. Moreover, the past year has been intensive, since most projects are coming to an end and the transfer of collections has initiated. The Conservation Lad, has designed and implemented a number of critical projects within this last period. Its small group of experts worked closely and all projects and actions are a result of fruitful teamwork. In order to be successful, the work had to be acknowledged and understood within the Library and also promoted to the public. It cannot be emphasized enough that preparation and planning for moving collections is the key to a successful project. It is important to have project managers, liaising with a range of departments within the organisation and with external contractors, while planning and budgeting as far as possible in advance of the move, are essential to the smooth running of the whole operation [Bendix, C., 2013]. Even by doing so, as it is expected in such complex projects, planned processes are constantly re-examined and re-organized as needed, while trying to solve problems to achieve the best possible results. For example, the scale of time and effort needed for the RFID-CL project was not estimated accurately from the beginning. The team had to work intensively and to re-organize its strategy in the process to meet the deadlines. Retrospectively, the project was successful because during that period the application of the RFID tags were managed successfully and collections were treated and prepared for their transfer. Melinex™ strips provided a good solution, they are easy to apply and remove if necessary without causing any damage to the books. However, it should be stressed that the process is time consuming comparing to the direct application of the RFID on books. In the NLG case, one employee attached 2,500 tags per day, whereas the conservation team, usually consisted of seven conservators had to examine the collections, treat them and select the books that the Melinex™ strips should be applied could not exceed the processing of more than 500 collectively. Therefore, it is a process that ideally should have adequate time ahead to be completed without excess pressure and stress. An immediate CL project is to form a conservation project to organize all necessary treatments for items with severe damages, and also to assess the application of Melinex™ strips in the long term.

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