

**Final Report on the Legal Deposit of Radio and Television
Broadcast Material:**

A South African Approach

**Commissioned by the National Department of Arts and Culture
Of the Republic of South Africa**

Investigated, researched and prepared by

**Jacaranda Intellectual Property and Consortium Members
Seed Entertainment
Izwi Multimedia, and
Tsepo Constable**

January 2006

TABLE OF CONTENTS	Page No.
ACKNOWLEDGEMENTS	4
FOREWORD	4
INTRODUCTION	6
1. OVERVIEW OF THE RELEVANT LEGISLATION	8
1.1. Legal Deposit Act 54 of 1997	8
1.2. Constitutional Act 108 of 1996 and the Promotion of Access to Information Act 2 of 2000	9
1.3. Broadcasting Act 4 of 1999	9
1.4. National Archives and Record Service of South Africa Act 43 of 1996	10
1.5. Copyright Act 98 of 1978	11
1.6. National Heritage Resources Act 25 of 1999	14
2. CRITERIA FOR SELECTION OF MATERIAL TO DEPOSIT	15
2.1 Available space	20
2.2 Human resources	21
2.3 Systems	21
2.3.1 Mandatory legal deposit	22
2.3.2 Voluntary legal deposit	23
2.3.3 Where to deposit	23
2.3.4 Material held by private individuals, institutions or foreign broadcasters	24
2.3.5 Number of copies to be deposited	25
2.4 Consequences of failure to deposit a work at a place of legal deposit	25
3. CATALOGUING AND CLASSIFICATION	26
4. FACILITIES FOR PRESERVATION	27
4.1 Costs and finance	27

4.1.1	Costs	27
4.1.2	Finance	29
4.2	For how long must the material be kept?	30
4.3	What environmental conditions are required?	30
4.4	What format should be used?	31
4.5	Quality control	32
4.6	Wide compatibility / stable writing	32
4.7	Archival reliability	32
4.8	Temperature adaptability	33
5.	ACCESSIBILITY, COPYRIGHT AND OTHER RIGHTS	33
6.	MANAGEMENT, EXPERTISE AND STAFF	35
7.	STORAGE AND CONSERVATION	36
7.1	Storage	36
7.2	Conservation	37
8.	TECHNOLOGY AND MATERIAL PRESERVATION	37
8.1	Technology	37
8.2	Material	37
9.	DATA MIGRATION	38
10.	ADAPTATION TO NEW FORMATS AND MAINTAINING AUTHENTICITY	39
11.	DISASTER RECOVERY OF DAMAGED MATERIAL	39
12.	RISK MANAGEMENT	39
13.	RELATIONS BETWEEN PLACES OF LEGAL DEPOSIT, THE SOUTH AFRICAN PUBLIC, STAKEHOLDERS, AND THE INTERNATIONAL COMMUNITY	41
14.	INTERNATIONAL PRACTICE	41
	Australia, Canada, Denmark, Finland, France, Germany, Italy, Netherlands, Norway, Russia, Slovenia, Spain, Sweden, Switzerland, United Kingdom, and the United States of America	
15.	RECOMMENDATIONS	46
1.	Key principles	48

2.	Responsibilities of repositories	51
3.	Copyright ownership	52
4.	Collaboration agreements	52
16.	BIBLIOGRAPHY	54
17.	TABLE OF STATUTES AND INTERNATIONAL DOCUMENTS	54
	ACKNOWLEDGEMENTS	

The task of this investigative report has been challenging and rewarding, but we did not work alone or unaided. Our thanks and regards go to the Department of Arts and Culture. For all their support, specifically to the team at the National Film, Video and Sound Archives in Pretoria who were always willing to provide assistance when we needed it. In particular, we must thank Dennis Maake and Danie De Waal for fielding our many enquiries, and for their enthusiasm and patience with our persistent questions.

Our further thanks and regards go to the stakeholders in the television and radio industries who have shared their knowledge, experience and information with us and have been tremendously helpful. Lastly to certain foreign embassies in Pretoria that assisted us during our research processes. You have all helped us find a common way forward to the preservation of our heritage for posterity in a protean environment.

It has been a wonderful experience working with you all and we are deeply indebted to you.

FOREWORD

This investigation into the legal deposit of radio and television broadcast material, commissioned by the Department of Arts and Culture. Is intended to establish a system that will ensure the preservation and availability of our nation's intellectual and cultural heritage. For both contemporary and future South Africans, and indeed for all other interested persons everywhere in the world.

The preservation of our intellectual and cultural heritage will be valuable for the purposes of education and research, and it is important to capture, document and store the country's broadcast heritage in one place for ease of management and access. Furthermore, this national project will preserve this heritage from obscurity and unintentional loss or destruction.

Thus a nation with a record of the past will always be able to inspire the future generations to strive even harder, but they can only glean the past if it is available somewhere. Otherwise a nation without a record of the past will still be grappling to find the present.

INTRODUCTION

It is a reality that the age of reading books has gradually diminished as the age of technology has dawned. Electronic media, like radio and television, have successfully competed with the print media for the attention of audiences.

It is only prudent that the relevant institutions adapt to the changing times and meet their mandates and responsibilities to preserve the wider spectrum of the nation's intellectual and cultural heritage.

For a long time, television and radio have been major carriers of all kinds of information in many of the official languages in the form of entertainment, news reports, edu-tainment, local dramas and so much more. The broadcast format, even if it is available as a transcript, does not always fall within the scope of the material the law prescribes for legal deposit with the national libraries of South Africa.

So it becomes apparent that there is a risk that the content of radio and television broadcasts. With their rich stores of information about South Africa's valued history, art, diverse cultures and languages, intellectual achievements and more. All of which have impacted on South Africa's being in meaningful and significant ways, if no effort towards appropriate preservation of any remnants that are still left of our history all may be lost forever if we do not take action as soon as possible.

The fairly recent advent of television in South Africa and apartheid's censorship laws meant that a large body of important and historic information about our past was commendably recorded by such foreign or international agencies. Ideally, the Department of Arts and Culture should enter into bi-lateral negotiations at government level in order to recover as much of this valuable material as possible.

In the light of the above, the legal deposit institutions need to develop a policy instrument and a strategic plan for the collection and preservation of broadcast material. Such a document should take into account the imperatives of the various national acts and consolidate them into one document to guide the legal deposit activities of the institutions in this particular regard.

This policy document would need to be flexible and able to anticipate and prepare for any looming and even distant technological advances that may impact on its collection and preservation activities. For example the shift from analogue to digital broadcasting, and to take into account what international alliances will be necessary and helpful to cope with these new developments.

Having noted all the above there is an urgent need for a follow-up investigation of certain electronic broadcast media such as the Internet. i.e. live web broadcasts,

web-cam, I-pod broadcasts , cellphone broadcasts etc. As this is the areas where technology is shifting towards meeting personalized individuals convenience and needs.

DRAFT REPORT ON THE LEGAL DEPOSIT OF RADIO AND TELEVISION BROADCAST MATERIAL: A SOUTH AFRICAN APPROACH

1. OVERVIEW OF THE RELEVANT LEGISLATION

1.1 Legal Deposit Act 54 of 1997-(1)

The Preamble to the Legal Deposit Act 54 of 1997 states that its purpose is to:

to provide for the preservation of the national documentary heritage through legal deposit of published documents; to ensure the preservation and cataloguing of, and access to published documents emanating from, or adapted for South Africa; to provide for access to government information; to provide for a legal deposit committee and to provide to matters connected therewith.

Under definitions, “document” is defined as:

“any object which is intended to store or convey information in textual, graphic, visual, auditory or other intelligible format through any medium, and any version or edition of a document which is significantly different from that document in respect of its information content, intelligibility or physical presentation, is considered to be a separate document”.

An example of a document would be a book, photograph, diskette, map, drawings etc.

The Legal Deposit Act 54 of 1997 obliges any institution which publishes and distributes work to the public in multiple copies or locations to deposit any material thus published and distributed with the places of legal deposit as indicated by the Act.

In terms of this Act, broadcasters are obliged, like any other publishers in the Republic, to deposit copies of their work with the places of legal deposit indicated by the Act. Our investigation and research revealed that, currently, only selected programmes and representative records of a specific day’s programming in its entirety are to be deposited with the National Film, Video and Sound Archives. This practice used to be undertaken by only the state broadcaster SABC who as well for a considerable period of time have not deposit anything with the archives. Apart from this, the remainder of a day’s programming is kept or discarded at the broadcaster’s discretion. If the broadcaster decides to keep certain programmes they remain the property of the broadcaster.

Now the investigation has revealed that for completeness sake all broadcasters commercial, public, free to air and subscription channels should be obliged to deposit as long as the content has a heritage value to the Republic of South

Africa. This would ensure that the public's right and level of access to this archived material, whatever the historical, cultural, intellectual or other value that it has for the nation is guaranteed at a neutral institution. But at the moment it all depends on the broadcaster's terms and conditions of access.

Perhaps the Legal Deposit Act should be amended to oblige any publisher in the Republic, regardless of medium, to deposit its complete body of work with the designated place/s of legal deposit. And should also be amended to allow the minister to issue regulations as and when changed times require such changes.

1.2 Constitution of the Republic of South Africa Act 108 of 1996- (2)and the Promotion of Access to Information Act 2 of 2000-(3)

The Constitution of the Republic of South Africa Act 108 of 1996 (the Constitution) and the Promotion of Access to Information Act 2 of 2000 (PAIA) guarantee access to any information held by the state. Or any information held by another person that is required for the exercise or protection of any rights.

In relation to the Legal Deposit Act 54 of 1997, what the Constitution and the PAIA guarantee is access to information already brought to a place of legal deposit. Once that information is with the place of legal deposit or any other government agency, it is regarded as information held by the state. However, should another person, a broadcaster in our case, hold the information, it is necessary for interested persons to show cause why access to privately held information is necessary for the exercise of their rights.

From this perspective it is imperative that all broadcast material of cultural, intellectual, political, or artistic value to the nation be deposited at a place of legal deposit so that current and future generations are not denied insight into their past because it is held by private individuals. A culture of open access to information about our comprehensive past will be much healthier and will make an ongoing contribution to our nation's growth and development.

1.3 Broadcasting Act 4 of 1999-(4)

Section 2(b) of the Broadcasting Act 4 of 1999 states that one of its objectives is to

“Safeguard, enrich and strengthen the cultural, political, social and economic fabric of South Africa.”

This is truly so, but unfortunately the Act does not explain how this will be done. Section 8(j) of its Charter, where the Act spells out the objectives of the broadcaster, should have placed an explicit obligation upon the broadcaster to tie in with the object of section 2(b) above. This opportunity was missed and instead the section obliges the broadcasting corporation to:

Establish and maintain libraries and archives containing materials relevant to the objects of the corporation and to make available to the public such libraries and archives with or without charge.

This section overlooks to say how long the broadcaster must keep the work in its library or archives. In practice, this means that when the broadcaster runs out space in the library or archives, the older material is discarded to make room for new material. Furthermore the broadcaster's main objective is not archiving, and given the involved and delicate nature of archiving broadcast material, it would be unfair to blame the broadcaster for the inadvertent deterioration of this material.

What this indicates is the pressing need for the Act to be amended in order to oblige the broadcaster to deposit all broadcasts of cultural, political, intellectual or artistic value to the nation. With a specified place of legal deposit where the necessary expertise and space exists, this place being the National Film, Video and Sound Archives or any other place designated by the Minister of Arts and Culture.

1.3 National Archives and Record Service of South Africa Act 43 of 1996-(5)

The National Archives and Record Service of South Africa Act 43 of 1996 is of fundamental importance as it prescribes how records of enduring value to the nation are to be archived and used by the public and the state.

It is worth noting that the Act does not segregate the records that have to be deposited. Section 3(a) of the Act simply requires that the national archives shall "preserve public and non-public records with enduring value for use by the public and the state."

What the Act implies is that it does not matter whether the record is with a private individual or a public institution, as long as it has the enduring value for use by the public and the state it must be deposited.

It goes on to state in section 3(d) that the archives:

Collect non-public records with enduring value of national significance which cannot more appropriately be preserved by another institution, with due regard to the need to document the nation's experience neglected by archives repositories in the past.

The scope of the archivist's role and more regular obligations has been broadened. They are not only custodians of what is placed at their disposal, but they have the duty and the authority to identify and collect records which are not or cannot be properly preserved by other institutions and individuals. And to address the gaps created by the shortcomings of the past.

In sections 3(b), 3(e) and 3(i), emphasis is placed upon the maintenance of an electronic archival information retrieval system that will enhance access to and the use of public records.

Section 3(f) calls upon the national archives to maintain a national register of non-public records with enduring value and to promote cooperation and coordination between institutions that have custody of such records. This calls upon the national archives to share their records with other institutions, both at the national and international level.

Section 3(h) requires the archives to actively promote current awareness services, which can, among other things, provide added intelligence for market development. According to Weaving (1991:300)-(1) a successful current awareness service must have adequate coverage of the sources of information, and it must be timely and selective, and so arouse the client's interest to follow up the information.

Weaving (1991) further maintained that the benefit to a client of a current awareness service is threefold. Firstly, it keeps the client in touch with what is going on in the area of their company's interests, and with topics of importance to themselves, and filters the information so that only the relevant remains. Secondly, it can supply useful methods, ideas, concepts, experience or information, which can result in a saving of project time, and inspire ideas for new work. Thirdly, those who are in the habit of keeping themselves up to date can use a current awareness service to save time that they might otherwise spend in looking through publications, or waiting for them to turn up on circulation.

In the light of the National Archives and Record Service of South Africa Act 43 of 1996. The deposit of broadcast material should not be treated any differently, as it is clear that any public or non-public record with enduring value of national significance has to be archived, and it does not matter what/who is the carrier of the record or the source.

So this would apply to broadcasters too, and in terms of the Legal Deposit Act 54 of 1997, they would deposit their material with National Film, Video and Sound Archives.

There should be an incentive to the depositors of work/s at the archive for instance there should be national or international promotions of the work/s deposited by the broadcasters. Which is sponsored by the Department of Arts and Culture and supported by the broadcasters, producers and other stakeholders. This can be every month or every after two months in the form of road shows, seminars and workshops this will act as a forum whereby the broadcasters have an opportunity to showcase their works to the public.

1.5 Copyright Act 98 of 1978-(6)

Copyright on any work a book, a film, a musical work, artistic work, computer work, broadcast work, etc authored by a person rests with that person or with the person who commissioned the work to be done. And that person has the right to reproduce, publish, perform in public, broadcast, transmit the work in a diffusion service, or adapt the work in any form.

The place of legal deposit as a matter of principle does not own copyright to any of the work deposited into its custody. Copyright and all other related rights remain with the copyright owner, but this does not mean that people do not have access to the record (copyrighted work) deposited with the repository.

The place/s of legal deposit in this regard has/have to ensure that the rights of the copyright owners are protected, while the public's right of access is unhampered.

Staff should be trained to control and monitor the public's use of the records, and this training should be coupled with effective systems to manage infringers.

The places of legal deposit, while protecting copyright, should take into account the exceptions provided in terms of sections 12 to 19(b) of the Copyright Act 98 of 1978. Whereby in certain circumstances, it is acceptable to make copies of a work without the prior permission of the copyright owner. For example, for fair dealing, judicial proceedings, illustrations for teaching purposes, criticism, review of the broadcast, for the purpose of reporting current events provided the source of the particular work being criticised or reviewed is acknowledged.

The Berne Convention for the Protection of Literary and Artistic Works (Paris-1971)-(1), the WIPO Copyright Treaty Geneva-1996-(2), and the WIPO International Convention for performers , Producers of Phonograms and Broadcasting Organisations Rome-1961-(3) all protect the international rights of the copyright owner from unauthorised or unjustified use of copyrighted work.

Most countries that are members of the Berne Convention have promulgated domestic legislation to comply with their international obligations of reciprocal treatment of members to the Convention.

The only binding international regulation that directly pertains to the preservation of audio-visual materials concerns ephemeral recordings, in article 11*bis* of the Berne Convention. It provides that national legislation may authorise broadcast organisations to make ephemeral recordings by means of their own facilities and for their own use without the consent of the author and they are required to preserve these recordings in an official archive.

In 1980, UNESCO General Conference on Preservation of Moving Images-(4) adopted the recommendations of the general conference for the safeguarding

and preservation of moving images, this being film, television and sound recordings, which are hereby recognised to form part of the national cultural heritage in the same way as textual information has been so regarded for centuries. South Africa is a member of UNESCO and it is imperative that South Africa complies with UNESCO's recommendations and establishes a comprehensive archive for the preservation of her broadcast material as part of our national heritage. UNESCO-5 has put in place some excellent training programmes for member countries, from which South Africa could benefit. Other organisations that could give support would be International Federation of Television Archives (FIAT)-6

When data is migrated from one format to another the issue of authenticity arises, and there is a risk that the authenticity and originality of a work may be interfered with and result in a copyright violation. Therefore, professional, well-trained and expert staff must handle the management of data transfer in order to prevent such violations of copyright and the moral rights of the authors and copyright owners.

In circumstances where use goes beyond acceptable copyright limitations, the user must get prior permission from the copyright owner, but where the legitimate interests of the copyright owner are not prejudiced by the use of the work such permission is not necessary.

The challenge facing South African copyright law is exactly that put forward in 1994 by the Copyright Convergence Group of Australia:

The challenge for copyright law in this new environment is to demonstrate that it can continue to effectively provide a just and acceptable balance between the valid interests of intellectual property rights owners and the public interest in fair and reasonable access to a wide range of information-(2).

In any case, the South African Copyright Act 98 of 1978 was drafted with the traditional print material of the time in mind. The Act therefore needs to take into account those instances whereby broadcast material, held by a place of legal deposit, is to be used by third parties for purposes other than those provided for by the exemptions in the Act. Further, the Act should be amended to take cognisance of recordings that are threatened either by the deterioration of their format or by the obsolescence of equipment needed to access them, and the need, therefore, for the whole work to be copied in the interests of preservation. The Copyright Act has also to offer guidance on what happens to work when its copyright has lapsed and then moves into the public domain, especially if it is held by a place of legal deposit. It would be helpful if the copyright legislation were further amended to state that even if copyright in a work exists, but the work has heritage value to the nation. The repository may make copies of the whole work/s for continued preservation, and, if necessary, to allow the transfer of data to new formats, etc and that such copying shall not constitute an infringement of

copyright.

In cases where copyright in a work cannot be correctly attributed, the copyright in such a work shall pass to the repository and the repository would have an obligation to maintain or preserve the work for the benefit of the nation.

In addition, the Copyright Act 98 of 1978 should align itself with the Promotion of Access to Information Act 2 of 2000 and the Constitution. Both of these Acts provide for access by any member of the public to information held by a public institution or by an individual where such information is for the protection of the individual's human rights.

Places of legal deposit need to be able to effectively manage the rights related to the broadcast material they receive for deposit, preservation and access. Therefore, it is recommended that at the time of receipt, the repository should ensure that the material is accompanied by the document (this can be schedule of rights), which sets out all the rights in the broadcast and the contact details of the owner/s of those rights. If there are no rights related to the broadcast it should be clearly stated. This would enable the place of legal deposit to quickly assist third parties that are interested in using the material rather than delay their access in an effort to establish the owner of the rights.

1.6 National Heritage Resources Act 25 of 1999-(7)

The objective of this investigation is to come up with recommendations on the best ways to preserve our countries cultural, historical, artistic, social and intellectual heritage as generated in the broadcast medium. The introduction to the National Heritage Resources Act 25 of 1999 states its objective as being:

To introduce an integrated and interactive system for the management of the national heritage resources; to promote good government at all levels, and empower civil society to nurture and conserve their heritage resources so that they may be bequeathed to future generations; to lay down general principles for governing heritage resources management throughout the Republic; to introduce an integrated system for the identification, assessment and management of the heritage resources of South Africa; to establish the South African Heritage Resource Agency together with its Council to co-ordinate and promote the management of heritage resources at national level, to set norms and maintain essential national standards for the management of heritage resources in the Republic and to protect heritage resources of national significance; to control the export of nationally significant heritage objects and the import into the Republic of cultural property illegally exported from foreign countries; to enable the provinces to establish heritage authorities which must adopt powers to protect and manage certain categories of heritage resources to provide for the protection and management of conservation-worthy places and areas by local authorities; and to provide for matters connected therewith.

The Preamble to the Act states:

This legislation aims to promote good management of the national estate and to enable and encourage communities to nurture and conserve their legacy so that it may be bequeathed to future generations. Our heritage is unique and precious and it cannot be renewed. It helps us to define our cultural identity and therefore lies at the heart of our spiritual well-being and has the power to build our nation. It has the potential to affirm our diverse cultures, and in so doing shape our national character.

Our heritage celebrates our achievements and contributes to redressing past inequities. It educates, it deepens our understanding of society and encourages us to empathise with the experience of others. It facilitates healing and material symbolic restitution and promotes new and previously neglected research into our rich oral traditions and customs.

This Act complements the objective of this investigation, specifically on broadcast material, and sections 5(1) to 5(7) offer broad and general guidelines to assist any authority engaged in the protection of our country's heritage. Section 7 (1)(a) to 7(1)(c), in particular, supply the qualifying criteria for grading objects or places which form part of this heritage:

- (a) Grade I: Heritage resources with qualities so exceptional that they are of special national significance
- (b) Grade II: Heritage resources which, although forming part of the national estate, can be considered to have special qualities which make them significant within the context of a province or a region; and
- (c) Grade III: Other heritage material worthy of conservation.

The above criteria should be coupled with the Norwegian selection criteria outlined in the table below, and should be adopted as guidelines for repositories of legal deposit broadcast material.

So why has there been no comprehensive and consistent collection, preservation and maintenance of these national treasures for posterity?

The answer will become clear from this report.

All around the world, those countries, which have successfully instituted the legal deposit of broadcast material, for example Norway, are nevertheless faced with the daunting task of selection.

Must South African broadcasters deposit each day's broadcasts in their entirety? Certainly not. The volume of broadcast material is overwhelming, so the next task is to set criteria to decide which South African material, in terms of its intellectual, cultural, political, or artistic value, must be preserved to ensure that this material is available in the present and in the future.

On a note of caution, it is important not to let technical issues distort comprehensive deposit efforts, as some material that is crucially valuable may involve complex processes of preservation which may prove very expensive, and policy makers may be tempted to decide against preserving such material.

It is suggested that the practice of granting no financial or other compensation to depositors of books be likewise the case for depositors of broadcast material unless it is with the express permission of the Minister of Arts and Culture, for example. In the case of a small broadcaster in possession of valuable broadcast material who cannot meet the obligation to deposit the material because it would be prohibitively expensive to make copy or the minister can authorise the archive to make such funding available for making a copy.

Similarly, if the circumstances of the repository prevent it from accommodating certain material, other places at provincial level or private initiatives can be accredited as custodians of their local heritage. On certain occasions it may happen that the local community wish broadcasts of their rituals to be preserved, while the national repository has decided against their inclusion. It is recommended that in such foreseeable cases of disagreement, it would be wise to encourage such material to be deposited at provincial or private archives.

Another relevant issue is who must take responsibility for ensuring that the material in question is indeed deposited? It is recommended that just as the author of the traditional book is responsible for the legal deposit of his work, so it should be the responsibility of the broadcaster to deposit what is prescribed.

The broadcaster, in essence, is in the best position to know for certain what they have published that is important to the national heritage. Therefore the broadcaster must ensure that, before he publicises the work, All the holders of rights along the course of a production, i.e. the producers, financiers, writers, etc., are aware that the work must be deposited in terms of the legal criteria. The broadcaster must also ensure that he receives an acknowledgement for receipt of the material deposited.

The language of deposit is a crucial element in the South African context. For South Africa has eleven official languages, all of which are used from time to time in broadcasts, and sometimes when the same event is broadcast simultaneously it may be broadcast in several languages depending on the target audience. Therefore, broadcasters need to know in which language they are expected to deposit broadcast material.

It is suggested that the National Archives should issue guidelines to this effect, whereby the broadcaster would be required to deposit in the language of broadcast accompanied by English subtitles if the broadcast is in another official language.

However, should the repository believe that a particular broadcast is well portrayed in a language different to that in the copy is deposited. Then it should have the right to request the broadcaster to deposit a copy in the language that the repository wants to keep, or to request the deposit to be made in both languages, subject to the repository meeting the costs of making a copy of the second language's broadcast.

The following guidelines have been set by the National Heritage Resources Act 25 of 1999 for determining whether a particular resource or object constitutes something of heritage value, and it is recommended that broadcast material be incorporated here:

- (a) places, buildings, structures and equipment of cultural significance;
- (b) places to which oral traditions are attached or which are associated with living heritage;
- (c) historical settlements and townships;
- (d) landscapes and natural features of cultural significance;
- (e) geographical sites of scientific or cultural importance;
- (f) archeological and palaeontological sites;
- (g) graves and burial grounds, including
 - (i) ancestral graves;
 - (ii) royal graves and graves of traditional leaders;
 - (iii) graves of victims of conflict;
 - (iv) graves of individuals designated by the Minister by notice in the *Gazette*;
 - (v) historical graves and cemeteries and
 - (vi) other human remains which are not covered in terms of the Human Tissue Act 65 of 1983;
- (h) sites of significance relating to the history of slavery in South Africa;
- (i) movable objects including-
 - (i) objects recovered from soil or waters of South Africa, including archaeological and palaeontological objects and material, meteorites and rare geological specimens;
 - (ii) objects to which oral traditions are attached or which are associated with living heritage;
 - (iii) ethnographic art and objects
 - (iv) military objects
 - (v) objects of decorative or fine arts
 - (vi) objects of scientific or technological interest, and
 - (vii) books, records, documents, photographic positives and negatives, graphic, film or video material or sound recordings, excluding those that are public records as defined in section 1 of the National Archives and Record Service of South Africa Act 43 of 1996.

Whether the particular work can be classified as of artistic, cultural, intellectual, or political heritage value.

The following guidelines should further be consulted as laid down by section 3(3):

- (a) its importance in the community, or pattern of South African's history;
- (b) its possession of uncommon, rare or endangered aspects of South Africa's natural or cultural heritage;
- (c) its potential to yield information that will contribute to an understanding of South Africa's natural or cultural heritage;
- (d) its importance in demonstrating the principal characteristics of a particular class of South Africa's natural or cultural places or objects;
- (e) its importance in exhibiting particular aesthetic characteristics valued by a community or cultural group;
- (f) its importance in demonstrating a high degree of creative or technical achievement at a particular period;
- (g) its strong or special association with a particular community or cultural group for social, cultural or spiritual reasons;
- (h) its strong or special association with the life or work of a person, group or organization of importance in the history of South Africa, and
- (i) sites of significance relating to the history of slavery in South Africa.

The repository and the broadcaster can use the above guidelines to determine which broadcasts should be deposited if a selective, as opposed to a comprehensive, system of legal deposit is adopted. If these guidelines are coupled with Norway's selection criteria given below, South Africa will then have a comprehensive framework for the legal deposit of broadcast material system.

The Norwegian approach to sound preservation is laid down in Plan for the Preservation of Norwegian Sound Recordings- (3) and these requirements are the same for purely audio and for audio-visual material drawn from radio and television.

The Norwegians make use of the following criteria:

- (a) The uniqueness of the recording
- (b) The representative nature of the recording
- (c) How endangered is the recording?
- (d) The educational value of the recording
- (e) Documentation available with regard to the recording
- (f) Action required with regard to preservation

In addition to the above criteria, the following points are also taken into account when making a selection:

- The rarity of the collection
- Diversity, scientific interest
- Physical state of collection, its vulnerability

- Functionality of the institution and its ability to manage and develop the collection (human resources, storage facilities, etc.)

In the following table they show how the material can be preserved according to the value thereof (note the table has been modified to reflect the South African situation, personalities, events, and so on.)

Value		Nature	Professional		Special Quality	
National	The collection is typical of a geographic area that is little documented elsewhere.	Political, e.g. release of Nelson Mandela, artistic, cultural, intellectual.	The topic of the collection is of a high quality, well documented and well catalogued.	Intellectual, educational, scientific, e.g. the first heart transplant by Dr. Christian Barnard.	The collection contains unique recordings. The collection has high educational value.	Inventions, extraordinary achievements, e.g. the pool cleaning equipment - Baracuda
Provincial	The collection is typical of certain traditions documented elsewhere in the country, but it contributes in important areas.	The Rain Queen, the Zulu reed dance.	The topic of the collection has long lasting flaws, but is largely intact from source to production. The topics are well researched within some sub-topics, and are well catalogued.	<i>Ipi 'n Tomb. Cry the Beloved Country.</i>	The collection has recordings of some value. Parts of the collection have been used in professional contexts, but there are other collections which cover the topics in question.	New documentaries on the life of Nelson Mandela, the Sudwala Caves.
Value		Nature	Professional		Special Quality	
Municipal	Parts of the collection have regional reference value, but they will mainly serve to supplement other collections. Material mainly of local interest.	Oppenheimer Tower(Soweto) , Voortrekker Monument (Pretoria).	Parts of the collection have reference value, but it is otherwise limited due to lasting technical intervention and flaws in content. The professional status has been partly assessed, and the material has been systematized, but perhaps not catalogued.	Inventions that were characteristic of the time.	The collection has recordings of some value. Parts of the collections have been used in professional contexts, but there are other collections which cover the topics in question more fully.	Individual political activists.
Tribal	The collection contains little material of regional reference value. The region is well documented in other collections.	Cultural practices.	The collection is already limited through lasting technical intervention and lacking in content. It is not systematized or catalogued	Traditional circumcision.	The collection contains recordings of little value either regionally or professionally.	

A list of selection criteria employed by the Federation of International Television Archives may also be useful as guidelines:

- (A) Actuality material of historical interest in all fields.
- (B) Actuality material as record of a place, an object or a natural phenomenon.
- (C) Interview material of historic importance.

- (D) Interview material indicative of opinions or attitudes of the time.
- (E) Fictional and entertainment material of artistic interest.
- (F) Fictional and entertainment material illustrative of social history.
- (G) Any material, including commercial and presentational, illustrative of the development of tele-visual practices and techniques.

These are simply guidelines which South Africa, with its diverse cultures and traditions, could use and adapt to her circumstances, For example the many broadcasts which issue from the community radio stations scattered all around the country. The content of which is of considerable importance to the respective communities and perhaps to a certain extent to the country. In this respect there is great need for close liaison between these community radio stations and the place/s of legal deposit to ensure the preservation of programmes of cultural, historical, intellectual or artistic value to the nation is promptly executed. In some regards it is only the community concerned, which could say per se what value a particular work has. This then tells us that it will be necessary to ensure the active involvement of the community in the consultative processes of archiving certain works.

Another issue for consideration is to maintain liaison with South Africans or institutions that produce works inspired by their backgrounds as South Africans and which therefore have a heritage value to the Republic, even if these individuals or institutions are not based in South Africa. Clear guidelines are needed on how to approach such material, especially at the point of commissioning. That is, if there is any photography of local heritage sites or townships involved, for example. However, if the production takes place outside South Africa but the content of the broadcast is worth collecting for the repository, the repository will need policy guidelines for such material.

Other guidelines that will be needed include the clearance of foreign institutions or individuals who are interested in commissioning broadcasts, documentaries or films in the Republic which will entail issues of a heritage value, and that it would be beneficial to have deposited. It should be made clear to these institutions or individuals that a copy of the work shall be deposited at a place of legal deposit.

Should the government adopt the selective system of legal deposit for broadcast material, which we strongly recommend, then, as explained above, a policy on the selective legal deposit of broadcast material has to be developed to guide the places of legal deposit and the broadcasters.

It will be important for the Department of Arts and Culture to seriously consider the option of simply archiving all broadcast material. Because it is not possible to know in advance when a particular work may become important, even though available resources may influence the practicability of this choice, this should be weighed against the possible long term benefits. This argument has been used for the great composers and artists of the past, for example, Mozart, Beethoven,

Leonardo Da Vinci, Michelangelo, each of whom died in dire poverty while now their works have generated great wealth for their estates and countries, and are indeed priceless.

Should the repository adopt a system of non-selective (exhaustive) legal deposit of broadcast material, a policy on non-selective depositing still has to be developed to guide the places of legal deposit and the broadcasters.

The foreseeable issues to be considered when adopting a system of exhaustive legal deposit are as follows:

2.1 Available space

The amount of space necessary will be determined by the system adopted for the legal deposit of broadcast material. If the traditional method of depositing analogue material is adopted then a considerable amount of space will be needed, but if the digital format were adopted, then only a minimal amount of storage space would be needed. If the repository should decide to collect broadcasts in analogue and convert them to digital format, or to collect broadcasts in both formats, then the need for more space must be taken into account.

2.2 Human resources

The preservation of archival records is a specialised field that needs competent management and skilled staff to monitor the condition of the collected, stored and accessed records. And management and staff should be able make informed decisions about the condition of the materials in their care and who will act timeously to preserve them. So, for example, if a broadcast on film, CD-ROM or VHS, required immediate restorative intervention, if the staff lacked the experience or expertise to make such an assessment, the investment in the collection and the community and scholarly value of its content would soon be compromised. Inevitably, the amount of material will be overwhelming, so a large number of skilled staff will be essential to collect, monitor the material and its users, check the condition of the material, administer the storage facilities and so on.

2.3 Systems

Should the selective or non-selective approach for such a legal deposit collection be adopted, it is important to avoid simply “warehousing” the collection. A collection of the size envisaged needs to be arranged in a structured and logical fashion so that its content is accessible on a daily basis in a user friendly way for both staff and users.

It is also helpful when the staff need to check the stock or audit the collection to have a well-organised collection. An appropriate system to store, index, catalogue and provide easy access to both the records and the holdings, grouped according to different categories such as news broadcasts. For example, will serve as an essential finding tool for visitors to the collection.

Should it be found that South Africa has sufficient resources to handle a project of this size then it would be wise to archive everything.

If all broadcast material is archived, it is strongly recommended that the collection run on a digital system. Off the air recording of broadcasts can be arranged with the broadcasters, given that most broadcasters currently use digital technology for transmitting their information from reporters in the field or for capturing transmissions digitally.

The digital system has the added benefit not only of being the technology of the moment, but it is easy to work with in terms of organising a collection that is searchable. The deposit process would be instant and digital material does not need a lot of physical storage space and hence reduces the cost of housing the material.

There is the fact that digital material is easily copied and distributed. So strict working security systems should be put in place to ensure that the rights of the copyright holders are not infringed in any way.

Our investigation found that a considerable majority of broadcasters still use the analogue format to broadcast and store their broadcasts. After the consideration of this report, it is suggested that it would be practical to commence with the process of digitisation immediately. Even if it means that, a parallel system would need to be established, namely a digital system to accommodate broadcasters already on the digital platform and an analogue system to accommodate those still using analogue. Some stakeholders have cautioned that such a project should wait until all the broadcasters have caught up with digital technology. But if the National Film, Video and Sound Archive were to wait it will only perpetuate the continued loss of the nation's heritage, and as there is no certainty as to when every broadcaster will digitise. This would be tantamount to neglecting an urgent identified task at hand while a waiting for uncertainty.

In any event, the current National Film, Video and Sound Archive repository currently contains material that urgently needs to be converted to the digital formats in the interests of preservation. So there is this current need for her to digitise the existing collection, in that when the process of collecting broadcasts from all broadcasters commences.

Whatever exists now has already been transferred to digital formats, and it would be easy then to accommodate those broadcasters who are currently using analogue format/s into this process.

On a practical note, the repository should retain and look after its analogue carriers and whatever is deposited in analogue as further backup copies in the event that there is any loss or corruption of the data when it is stored digitally.

2.3.1 Mandatory legal deposit

Mandatory legal deposit is where the legislation compels the broadcaster to deposit copies of specific broadcast material (if selective) or to deposit copies of all broadcast material (if non-selective) to a specified place of legal deposit. If the broadcaster fails to comply, penalties are enforced, the penalties laid out by the legislation may range from seizure and confiscation of the copies, as is the case in Italy, Algeria, and Madagascar, or, fines are imposed as is the case in Sweden, the United States, Finland, and Portugal.

It is worth noting that some broadcasters take care to deposit their material regardless of whether the system is mandatory or voluntary. Because they have failed to keep copies or records of their own broadcasts owing to a lack of resources. Hence the organised and responsible care of the places of legal deposit serves as a resource and backup for the broadcasters themselves. Furthermore, if it were possible for the National Film, Video and Sound Archives to bear or share the cost of making copies for archiving this heritage, the broadcasters would no doubt gladly make their material available.

2.3.2 Voluntary legal deposit

A system of voluntary legal deposit, whereby, of their own accord, the broadcasters forward all (if non-selective) or some (if selective) broadcast material to the place of legal deposit.

Mandatory legal deposit has been applied to books and the arrangement is for the publisher to deposit the work at the designated place of legal deposit.

Book publishers are generally well-organised institutions and are easy to contact or trace, but even then, South African books are not all safely or completely deposited to designated places of legal deposit. One then can only assume that a voluntary deposit system for broadcast material, in a country with so many broadcasters, especially in radio, even if it is backed up by legislated penalties, will still not be as comprehensive as one would expect.

So legislation would need to be backed with working enforcement measures for compliance.

2.3.3 Where to deposit

The French are the founders of archiving, and they have chosen to house legal deposit materials according to type in different designated places of legal deposit. Hence, the French historical audio-visual heritage is kept, at no cost to the broadcaster, at the *Institut National de l'Audiovisuel* (INA), and it is well publicised among the broadcasters as the place where they are required to make their deposits. The INA is responsible for all the broadcast deposits of the country's national television and radio channels and the deposit and the preservation thereof is done digitally.

The Danish deposit radio and television recordings at the Danish National Media Archive.

In Spain, the custody of this national heritage is left to the broadcasters, and this system has certain flaws. The broadcaster for various reasons can hinder public access to some of this information for study or research. And for want of space and to cut costs many old and valuable recordings are simply destroyed because they do not generate cash while in the meantime they need to make way for newer material.

It is recommended that a neutral place like the South African National Film, Video and Sound Archives should be made a fully-fledged receiving repository for broadcast material, as it already has a legal deposit collection of broadcast material. As a consequence of this undertaking the repository would be responsible for a national bibliography of the broadcasts of various genres in its holdings. The resultant national and international exposure would also be responsibility of the repository, The repository should also foster national and international collaboration arrangements. The result hereof would be an increased demand for and appreciation of the work of South African broadcasters and producers locally and internationally.

It then will be the responsibility of this place of legal deposit:

- (a) To conserve all records deposited with it and to protect all material deposited with it from abuse or uncontrolled use;
- (b) To work according to internationally acknowledged archival standards in terms of classification, cataloguing, conservation and preservation;
- (c) To engage in research and study projects that will enhance the quality of the audio-visual material collected and to keep pace with changing technology;
- (d) To co-operate and liaise with other repositories and institutions which possess broadcast material of South African heritage value and which are not in our archives by such means as, for example, exchange agreements,

- lease to copy agreements or buy out arrangements (in exceptional circumstances);
- (e) To advise broadcasters on how to preserve their broadcasts before they deposit them, including those that they will maintain in their own corporate archives;
 - (f) To guarantee effective public access to the recordings in the repository by raising awareness of their existence, while at the same time, respecting the rights of copyright owners. If the material has very high commercial value and there is a risk of unwarranted exploitation, the place of legal deposit could allow only very controlled access to such material.

2.3.4 Material held by private individuals, institutions or foreign broadcasters

Copies of broadcast material which is held by a private individual, and which constitutes part of the nation's heritage in terms of any of the above-mentioned criteria. Should be sought by the place of legal deposit so that a copy of the work is obtained and kept at the place of legal deposit. If the cost of making a copy is too expensive for the individual to bear, the repository (based on the decision of the minister) should fund the making of the copy.

In cases where an individual, who has been informed of the importance of such a record to the nation's heritage and the need for him to make a copy available to the place of legal deposit. Or at least to make it available for the repository to make a copy for archiving ignores several reminders. The repository should, with all due respect to the individual's rights, his/her ownership of the recording, and their reasons for ignoring the requests of the repository, have the authority to take temporary custody of the recording in order to make a copy for the place of legal deposit. It is hoped however that negotiations would never break down to this point very often.

In cases where the records are held by foreign individual/s, institution/s or broadcaster/s, there is need for an institutional approach. The National Film, Video and Sound Archives needs to approach the holders of these broadcasts for copies for preservation. If the holders are not amenable to this and require payment for the material, then goodwill sponsors benefactors, charity organisations, and others. In conjunction with the National Film, Video and Sound Archives could raise funds for the purchase of copies of these broadcasts and thus enable the repository to complete and fill the gaps in our nation's broadcast heritage in all respects as much as possible.

2.3.5 Number of copies to be deposited

The number of copies to be deposited by the broadcaster should be one master copy per broadcast, which must be deposited within the first month of such broadcast.

If the broadcast material has been stored by the broadcaster from past broadcasts, then a moratorium period will be necessary to give institutions and individuals a time frame within which to deposit the broadcast material which has heritage value to the nation at the designated place of legal deposit. (This can be implemented should the place of legal deposit believe that there is a need to collect certain broadcasts for the sake of completeness.)

2.4 Consequences of failure to deposit a work at a place of legal deposit

There should be penalties for failure to deposit the work within the determined time, or failure to deposit at all. These penalties could take the form of:

- (6) financial penalties as is the case in Sweden, the United States, Finland, Portugal etc, or the
- (ii) Seizure and confiscation of material from the broadcaster as is the case in Italy, Algeria, Madagascar etc.

It is recommended that in the case of seizure and confiscation of the material. This should merely be a temporary confiscation, sufficient only to make a copy of the recording and while taking great care not to lose or harm the holder's property in the process. And then return the broadcast to the owner/holder. It is important to maintain good and respectful relationships with broadcasters, even when they prove recalcitrant.

3 CATALOGUING AND CLASSIFICATION

Proper cataloguing and classification are the backbone of any place of legal deposit. They allow the repository to know what it has in the collection, to know what has been received and what is still to be deposited, where each item is located, what the content is, whether there are similar recordings in the archive, what is missing or damaged or being restored. Cataloguing and classification are extremely important at the repository's point of contact with the public, because it makes finding what a client needs for reference and research purposes so much easier, for example, where to find all the recordings on the opening of Parliament for the previous year.

The broadcaster should submit, perhaps on a template cataloguing / classification form, all the available information regarding a particular broadcast, for example, genre, year, title, writer, director, producer, general field of focus

(science, arts), and its specific area of focus. The need for professional cataloguers/ classifiers for the repository will be great.

A user-friendly cataloguing and classification approach should be applied to the collection, so that access to these valuable recordings is quick and simple. It should not take the repository long to locate a recording for a researcher, a student, or a businessman.

A proper cataloguing and classification system helps the repository monitor any records that are deteriorating and need to be salvaged, as it would be clear which are the older recordings.

To maintain the records and their viability there has to be a monthly, bi-monthly or yearly physical assessment of the digitised/ manual record of the recordings contained in the archives against their physical availability and viability. Physical and systematic accounting followed by playing back recordings to ascertain their functionality should be done.

There has been no comprehensive system of collection of broadcast material at one central point for preservation and conservation, and what must have been lost is unimaginable. It is important therefore, even before the formal process of collection begins and before the necessary legislation and guidelines are in place, to start collecting what is available.

Even if only on a voluntary basis, in order to avoid any further gaps and to prevent the National Film, Video and Sound Archives experiencing bottlenecks because of the sudden rush of records from the various broadcasting stations. A gradual progression into the system would be advisable.

The National Film, Video and Sound Archives, in order to encourage the deposit of records. Should see to it that the local broadcasts they keep in the archives are exposed to foreign counterparts and relevant stakeholders. In the same way that the traditional book environment uses the International Serial Standard Number (ISSN) and the International Standard Book Number (ISBN) to expose local authors to foreign markets.

4 FACILITIES FOR PRESERVATION

When talking of facilities for preservation we have both the carrier of information, that is, the CD-ROM, the DVD, etc., And the equipment to playback the carrier, such as the video player, the LP record player, computer, etc. Certain broadcast material is very delicate to preserve. Special facilities are needed that must meet certain standards or specifications in order to preserve the documents for a considerable long time. Furthermore, the facilities have to be adapted/adaptable to the rapid changes in technology and be adapted/adaptable to the new formats,

otherwise sooner or later the formats in which the material is stored will become obsolete or the hardware/ equipment for playback becomes obsolete.

Whatever storage method is selected various factors have to taken into account as listed below.

4.1 Costs and Finance

4.1.1. Costs

The exact cost of developing a fully functional repository is hard to estimate until a full-scale operational system that has been adopted and is in place. The costs of the deposit of broadcast material will be determined by various factors such as format/s, technology, a selective or non-selective deposit policy, staff, storage facilities, and so on. While digital storage may initially be very expensive, it will be cost effective in the long-term because it allows for the easy management of records, and access to them and the monitoring of infringement. The National Department of Arts and Culture should allocate ample resources to the National Films, Video and Sound Archives to keep pace with technological changes.

According to section 8(3) of the Broadcasting Act 4 of 1999, public and commercial broadcasting services must comply with international technical standards and the broadcasting system must be readily adaptable to scientific and technological advances. The current international trend in broadcasting is the use of digital technology for all news collection and transmission.

According to our findings, South African broadcasters have adapted well to the international standard of digital broadcasting and those that have not yet done so intend to move over to digital broadcasting. This means that the National Film, Video and Sound Archives should adopt these standards to achieve compatibility with what the broadcasters will deposit in digital formats.

To help curb or spread the burden of the costs, the National Video, Film and Sound Archives will need to form partnerships with institutions like UNESCO, broadcasting and other companies, and universities which have a desire to preserve the country's heritage and to assist in whatever manner they are able. In addition, to make it cost effective and attractive to depositors.

There would be need for standardisation of format/s that the depositors are required to deposit their work at the various institutions that require such deposits. I.e. The Independent Communications Authority of South Africa (ICASA), the South Africa Heritage Resource Agency (SAHRA), and the National Film, Video and Sound Archives (NFVSA).

On implementing the digital model, the Australian National Library's example should perhaps be followed, including our recommendation that the Department devise a budget with a view to digitising the archives for broadcast material. Despite the provision for allocation of ample funding. There has to be a re-allocation of existing resources and the streamlining of activities within the units involved, and to carry out the project in phases, e.g. Phase I: Digital Object Storage System, Phase II: Digital Objects Management System, and Phase III: Digital Archive System- (4).

The table below demonstrates some estimates in US \$ for establishing Small, Medium or Large Digital Mass Storage Systems (DMMS).

Total holdings	Ingest/yr.	Retrieval/ yr. Tape drive	library/ hard disk
Small 5TB(terabytes)	500GB(gigabytes)	50GB(gigabytes)	\$ 40,000.00
Medium 50TB(terabytes)	5TB	100GB(gigabytes)	\$ 400,000.00
Large 500TB(terabytes)	50TB(terabytes)	1TB(terabyte)	\$ 4,000,000.00

Source: Hafner, Risnyovzky, and Schuller. Low cost digital archives, a small scale approach to digital audio archiving -(5)

These prices are for the year 2004, and at the moment we can safely work on an increase of 10% or more on the above prices. So, currently we can look at the small archive at a 10% increase currently costing SAR 286,000.00 equivalent US\$ 44,000.00, a medium archive will cost SAR 2,800,000.00 equivalent US \$ 440,000.00, and a large archive will cost SAR 28,600,000.00 US\$ 4,400,000.00.

The above estimates are for radio broadcasts, but for television broadcasts the figures will multiply by at least three times because of the use of images. All these prices may also vary depending on where the particular suppliers are sourced. Since a Digital Mass Storage System can be upgraded. It would be prudent to start with the small or medium system and then gradually scale it up, as the repository tackles the challenges inherent in the system and gears up to accommodate all broadcasters in radio and television with all their various formats and problems. Also it is normally easy to absorb a gradual upgrade other than a huge expense at one time, and as technology is upgraded almost annually it is highly recommended that this be taken into account when forecasting the financial needs of the repository.

These prices refer only to the actual cost of the storage system. The cost of installation, technical staff, maintenance costs, other ancillary and hidden costs have to be taken into account, and of course the fluctuations in the exchange rate.

4.1.2 Finance

Once the initial capital outlay and costs have been met and the archive has established a functional digital system, the question of finance for continued management and functioning of the archives arises:

I. The sources of funds

The archive has got to identify all its sources of funding, i.e. government budget, grants, endowments, donations, fees or charges for accessing the records, etc.

II. The use of funds

The archive, on a year to year basis, must have outlined projects and objectives it intends to achieve, thus taking into account the amount of money that the archive has at its disposal. It can address the deficit of other identified areas of need, i.e. preservation, restoration, migration, research, training, etc. through other sources of funding.

III. The management and administration of the funds

The archive shall have financial systems in place for proper financial management, planning, analysis, monitoring and of course record keeping. The budget can go along way if it is applied well for all its intended purposes in a properly planned managed and monitored manner. So only carefully planned projects with proper financial evaluation should be embarked on, with follow-up management, monitoring and record keeping, otherwise there will be a myriad of half-completed projects that have not been budgeted for sufficiently.

4.2 For how long must the material be kept?

The duration for which records must be kept is informed fundamentally by the reason for which the archive was established. The most common reasons for establishing an archives are cultural heritage preservation, organising information, disseminating information, research, study and so on. The National Film, Video and Sound Archives' existence encompasses all these functions. From that perspective, the main purpose of the legal deposit of the broadcast material is to preserve records for posterity, This means the deposited broadcasts must be kept as long as possible. The worn out recordings if they cannot be salvaged or transferred to other formats would have to be discarded to

create room for other records. Or if they qualify as material worth transferring to the museum then they could be moved to the museum, as this is another institution of national importance that complements the archives.

On the other hand for reasons of space, The archives can apply the weeding out principle of their held collection. What is no longer/not relevant to the cultural heritage of the nation according to a set out policy, can be removed and given back to the depositor or be moved to the museum, if it is a record that can be accommodated in the museum. If the material does not qualify for removal to a museum or the depositor cannot be found, the place of legal deposit can, after a very careful process of evaluation, destroy the recordings it has weeded out.

4.3 What environmental conditions are required?

Certain environmental conditions pose threats to the preserved records, for example, air, humidity, dust, light, water, temperature, disasters, and so on. Storage rooms should meet certain storage standards for any adopted format.

Air: polluted air especially in cities where pollution is greatest contains gases which react with water and/or irons to form sulphuric acid, which can damage any carrier.

Humidity: extremely hot and humid conditions create conditions that are conducive for the growth of bacteria or fungus, which can damage the carrier.

Dust: dust particles can be corrosive to discs and cause scratches, and when fine dust particles settle onto videotapes they may deteriorate in quality.

Light: natural or artificial light can damage the carrier. If disks are exposed to direct sunlight for long, it can cause the audio disks to bend and warp, and videotapes or film reels to stick together or not turn when played. Artificial light can be equally harmful to records, especially as ultra-violet rays damage records in the same way as natural light. It is therefore best to make use of incandescent lights in storage and playback areas.

Water: as a result of flooding or human negligence, error, accident, etc., damage can occur to records, audio disks, CD-ROMs, DVDs, film reels, etc. All these records should be kept in a waterproof environment and any possible contact with water or liquid substances should be prevented.

Biological factors: A combination of the factors above and of biological factors, such as bacteria, fungus, mould, rodents, insect infestations, etc., can all lead to the damage or destruction of the records, hence these too need to be closely monitored.

Disasters: these are natural events over which man has no control, for example, earthquakes, windstorms, floods, fires, lightning to name a few. However, it is possible to prepare for and to control how we manage a disaster. Therefore, ways to compensate for the threat disaster can be incorporated into the design of the building. For example, the drainage piping, fireproofing and fire alarm systems, the roof elevation/construction, lightning rods and electrical wiring that meets rigorous safety standards have to used/installed.

Staff who are highly disciplined about safety measures, and appreciate instructions like avoidance of cigarette smoking in the repository or understand the responsible use of electric heaters in winter, and are able to put a disaster plan into action, and so on. These aspects should all be factored into the storage facility. If the repository must use an existing building, rather than a building designed especially for its needs, then the existing facility will have to be modified to withstand some of these catastrophes.

4.4 What format is to be used?

Whichever format is adopted it has to meet industry standards to avoid a multiplicity of formats, and if it is not standard it should be easy to adapt to other formats. The following factors are to be taken into account when choosing the format/s the repository adopts:

- Durability of the format is essential to the preservation of records for as long as possible.
- Costs should also be considered when choosing a standard format.
- Frequency of use should be considered in choosing a particular format, as certain carriers deteriorate more quickly with repeated playback, so the most resilient carriers should be preferred.

It is worth noting that it is wise to always retain the original carriers, as there is always a danger that data transferred to a new carrier can be lost or corrupted. e.g. Data stored in a computer server getting lost, and that new technology may be able to retrieve information contained in these carriers in ways as yet undiscovered. If the original carrier has been retained it is always easy to re-migrate the information to the computer server, and there is the assurance from the computer experts that it is always possible to recover lost data by reconstructing the computer codes. As possible as this may be, it requires technical skill and can be costly in monetary terms and in terms of time if a large amount of data was lost. According to one estimate by an engineering firm in the United States, it would cost SAR 416,000.00 US\$ 64,000/00 to rebuild 20 megabytes of lost data from its codes.

4.5 Quality control

The maintenance of records to prevent malfunction, or the deterioration of sound or picture quality, and so on, is not a matter of careful handling and storage. It is important for long-term preservation to consider, among others, the points which Adrienne Muir Legal deposit of digital publications: A review of research and development activity -(6), lists below as factors which can contribute from the outset to the poor quality of recordings:

- the correct version
- in the required medium or format
- complete
- undamaged
- error free and fully functional
- not copy protected

As a result, if the repository does not have the correct version or has an incomplete record of a broadcast or if it encrypted for copy protection then the quality is already compromised even before the item has joined the collection.

Any of these points constitutes obstacle to the repository's long-term objectives of preservation and to the public's right of access.

4.6 Wide compatibility / stable writing

Ideally, a widely compatible format that is stable once it is written should be adopted so that the Archives avoid various multiple formats that will require a lot of space and staff to manage. Besides being stable the format should also be stable when transferred to another carrier.

Thus, it is recommended that the Department of Arts and Culture adopt a format that is used by the majority of broadcasters, so that there is no hardship on the broadcasters, when the regulation/policy/act on the legal deposit of broadcast material is introduced.

4.7 Archival reliability

Some records need to be thoroughly checked to assess their reliability before depositing them with the place of legal deposit. From the outset, it has to be established whether the material is in good order before it is deposited, with regard to the quality control elements mentioned above, and the material should be the specified format. It would be fruitless to receive material, which the repository's storage facilities are not designed to receive, or to receive incomplete, damaged, or partially functional broadcasts.

4.8 Temperature adaptability

Certain storage formats are temperature adaptive and do not deteriorate in quality if exposed to extreme conditions, so it would be prudent for the place of legal deposit to prefer such formats (temperature adaptive). On the other hand, the place of legal deposit should take certain precautions in their preservation efforts in order to attain longevity in the carriers, some of which include:

- (a) Preventative conservation; improving conditions around the storage facilities by keeping them free from dust, humidity, water, etc.
- (b) Restoration; treatment aimed at bringing the carrier back to its original pristine condition.
- (c) Direct conservation, that is, the treatment of the carrier to slow down deterioration.
- (d) Conversion; copying the contents of the carrier to another type of carrier with more longevity.
- (e) Preservation as a daily process should be informed by the choice of the carrier, the cataloguing process, the recording techniques and existing facilities for the daily maintenance.

5 ACCESSIBILITY, COPYRIGHT AND OTHER RIGHTS

One of the reasons for having a public library of this specialised nature is to enable those who cannot afford to purchase the records they require. Or access the records they require from the broadcaster/s premises. Opportunities at a minimal access fee to access this material at place/s of legal deposit. Access may be interpreted in two ways: firstly, it signifies the legal conditions by which records are available for use, and secondly, it signifies the actual ability to use the records as determined by their contents or arrangement.

Over the years, copyright holders have expressed grave concern that there are those who get access to their work at places of legal deposit with the intention of violating their rights. These violators copy deposited material which they would have paid for and consequently deny sales revenue to the holders of the rights. Measures to render such practices almost impossible must be in place.

The other aspect of access is the internal arrangement of the repository, which depends on which system of storage is adopted and where the various collections are situated, the contents thereof and the condition in which they are.

Traditional copyright in books and music has been a big problem over the years, and technology has made copyright infringement even easier, especially when the material is deposited in a digital format. The susceptibility to copying is greater than with the former carriers, which made copying cumbersome and time consuming, but with today's technology it is possible to copy an electronic book of 21 000 pages in less than an hour!

A balance has to be achieved between the public's right of access to the nation's media resources and respect for the rights of copyright holders.

Once legally deposited, a work is placed under the custody of a state agency or department which in turn becomes public information, which in terms of the Constitution Act 108 of 1996 and of the Promotion of Access to Information Act 2

of 2000. Obliges government departments and their agencies to make available to any member of the public information that is held by them within certain limitations. And in certain limited circumstances i.e. research, study etc any member of the public should be allowed to make copies of certain portions of the deposited work. Thus access to legal deposit collections should therefore be free, although a request for a reasonable administrative fee should not be considered a breach of this principle.

Another issue to consider is access by the depositor. There have to be agreements and arrangements between the place of legal deposit and the depositor for future access to the deposited material by the latter. While there should be an understanding that the depositor can always have access to his work by prior arrangement, at reasonable times, and as determined by the place of legal deposit, there should be no occasion on which the depositor may remove the copy belonging to the repository.

Where the recordings at the repository are still highly marketable and there is high demand for its re-use. The archive, which is performing the service of preserving this work for the broadcaster, should be able negotiate with the owner of the copyright to legally share in the profits generated by the broadcaster, which costs must be used for continued preservation activities.

Noting that copyright expires 50 years after the death of the copyright owner, If in these circumstances the copyright owner never left any heirs. It should then be the responsibility of the repository to manage the rights related to the work in the archives, or if there are any works that are commercially viable that have fallen into the public domain the commercial benefits thereof should be to the benefit of the repository.

There may be instances where, after a considerable search for the copyright owner of a particular broadcast held at the repository, the copyright owner cannot be found. At its discretion, the repository should have the authority to go ahead and negotiate with a third party as to how to use the broadcast and what royalties in the prevailing market situation the third party shall pay.

Whatever royalties are realised after commercialising the work as intimated above, and the rightful owners are not forthcoming, the repository should keep such royalties for a stipulated period of time.

After that period, the repository should be able to utilise such proceeds for its activities. But in the long term the repository can explore building a trust fund to address such issues.

6 MANAGEMENT, EXPERTISE AND STAFF

To achieve an optimal system, the repository will need staff with the professional expertise and the management skills to maintain and preserve these assets for the nation.

Management staff of such a resource require/s a person/s with the ability to plan, control, organise, and direct the institution. Such a person/s would need experience, and a clear understanding of the relationship between management, technology, and legal responsibilities of a repository.

And most of all the management staff must have the passion for archiving, and further knowledge of archiving. Deep appreciation for its value is necessary in order to steer the staff team and the institution to realising the goals and objectives of the organisation of preserving the national heritage, while making it accessible to her people.

To ensure that the policies and strategies in place are achieved and the plan of action is working, there needs to be a regular audit to determine whether certain programmes or procedures are still required and effective, or if there is a need for improvement.

This expertise shall entail a lot of things, some to do with adapting the material into new formats while maintaining the authenticity and quality of the work, restoration and the rescue of damaged material while maintaining quality and authenticity, etc.

The archives shall also need to train or acquire professional cataloguers and classifiers who would introduce a new standard for cataloguing and classifying broadcast material. Or cataloguers and classifiers who would be able to adapt existing systems (international systems) to suit South African archival needs, while taking into account all the categories of local broadcasters, but while still meeting internationally accepted standards.

Before any implementation of digital archiving projects can take place, there may be a need to retrain existing staff. This can be done by attaching staff with leading broadcasters around the country that already have functional digital archives in place or elsewhere in the world whereby they can acquire the necessary skills and expertise.

This can be done through exchange programmes with countries that have taken the lead in archiving, and the last option would possibly be to hire expert staff who would be able to implement the new system that would be introduced.

Of note is that there will always be need for ongoing workshops, seminars and training in order to keep staff up to date and in touch with their peers locally and internationally on changes that are taking place in archiving.

7 STORAGE AND CONVERSION

7.1 Storage

Storage involves the carrier, the building/s where the material is kept, the containers for keeping the carrier, and the equipment for handling and accessing the material.

Whatever kind of storage or storage facilities one chooses will be dictated by the format one chooses. There are various determinants in making this choice:

Environmental conditions - controlled environmental conditions increases longevity, maintains the original condition of the material, i.e. dust filters, ventilation/air conditioning, keeping the documents away from direct sunlight, avoiding magnetic objects, dust, sources of radiation. Some of the recommended temperatures for various carriers are:

Magnetic carrier: temperature = 16 to 18 degrees; humidity = 35% to 45%

Black and white photo carriers: temperature = 16 to 18 degrees; humidity = 50 to 55%

Colour photo carriers: temperature = -6 to -2 degrees; humidity = 20 to 35%

Best practice for archival media whether analogue or digital would be to select the best quality archival system affordable. These are some of the formats from which to choose from CD-R, DVD-R, DAT- (Digital AudioTape) and DLT (Digital Linear Tape).

It is important bear in mind that whatever archival media is selected should also take into account compatibility with the systems that depositors use for their broadcasts, user friendliness, durability and cost, as the durable formats for storage are very expensive, i.e. the platinum based CD-ROM or optical tapes, etc. One thing that the repository has to ensure is that there is a standard format in which the records are deposited and accessed.

Archival copies - multiple copies should be made and stored in various safe locations, and if possible the copies should be stored across different storage media and in different, but compatible, software, just in case one medium malfunctions or a file is corrupted.

7.2 Conservation

Conservation means intervention measures to rescue, repair and restore a damaged or ageing carrier. Proper storage methods should be put in place to avoid all the effects that arise from, for instance, a carrier coming into contact with water, or exposed to direct sunlight. Moreover, it is important to have the staff, equipment and materials needed for conservation of the collection.

8 TECHNOLOGY AND MATERIAL PRESERVATION

8.1. Technology

There has been an argument for and against the preservation of technology, the argument for has been based on the maintenance of authenticity and originality, while the argument against is that technology preservation is very expensive and also not practical, for instance the maintenance of the gramophone to play old records or software and computers to be able to run certain programs in their original format, eventually this equipment will break or wear and tear due to regular use and the need for repairs arises. The market may then not have the spare parts to repair the equipment or the expertise in this old equipment may no longer be available. As a result the material which is not adapted to modern formats would be rendered obsolete.

In this case should the depositors format not be standard in the industry and it would be very expensive to adapt to a modern format. It would be required in certain occasions for the broadcaster to supply the repository with the equipment, so that the work can be accessed. This is the practice in Denmark according to Act No 423 of June 1997 section (2) sub-section (2)-(1). South Africa can adopt a similar approach to alleviate some practical difficulties of the system used by the broadcaster.

Copyright law should not be used to prevent the migration of information from one format to another in adapting with changes in technology and to improve preservation techniques. Therefore, the copyright act should possibly be amended to allow information-providing institutions such as libraries and archives liberty to convert copyright protected materials into digital formats for preservation and conservation.

8.2. Material

On the choice of preservation equipment or tools there are certain considerations that should be to be taken into account. These precautionary measures are applicable to information stored on videotapes, film reels or magnetic sound recordings, as these are susceptible to the vinegar syndrome or colour reversal in film.

The vinegar syndrome is when acetate turns into acetic acid and affects everything around it. Colour reversal basically refers to the deterioration of colour from its original colour to any invisible colour, and this makes certain pictures fade and commonly affects colour film.

The videotapes have the problem of squeezing the signal onto smaller and smaller amounts of tape and these many format changes mean that the playback

equipment becomes obsolete and spare parts difficult to source, and the human knowledge required to operate and repair the equipment also disappears. Videotapes are also susceptible to chemical decay.

The material to be used for preservation has not only to be durable but must also to be effective when information is copied from one format to another, as formats come and go with increasing frequency.

From the Norwegian analysis of the different carriers, it seems that optical carriers have a long life span, e.g. an optical disk lasts between 30 - 200 years under optimal storage conditions and 5 - 100 years under normal room temperature and humidity.

9 DATA MIGRATION

This means the transfer of content from one carrier to another. This is a term commonly used to the computerised transfer of data, but it can apply in any equipment, as the whole purpose of content transfer from one carrier/format to another is the adaptation of the content to be viewed, used or played in modern equipment.

This is a crucial process in the current environment, where technology changes rapidly. The process needs highly skilled persons who are able to capture data/information, which in the case of old carriers involves the question of integrating this information with the new carriers without tempering with its authenticity or, in the worst case scenario, losing the data completely.

Ideally, data should be migrated from a copy of a copy, to ensure that should any loss of data occur, partial or complete, it is not the only copy available. If data has been stored digitally one may store it in an older format, for example, on CD-ROM, DVD, etc., to ensure availability.

According to our observations, there is an urgent need for the National Film, Video and Sound Archives to migrate data from the existing old formats to current formats before implementing the recommendations of this report. This will help the archives to avoid a backlog.

10 ADAPTATION TO NEW FORMATS AND MAINTAINING AUTHENTICITY

As we move from the analogue to the virtual age of communication there is a need to adapt the existing cultural, intellectual, political and artistic heritage of the nation into formats which are commonly used and accessible to many, or, formats, which are in line with existing equipment. While adaptation of the carrier is the most prudent step an archiving institution can take, great caution should be

taken against accidental adaptation of non-intended content, thus distorting originality and authenticity and thereby violating the holder's copyright and moral rights. There are certain elements to look for to establish authenticity, for example, assessment of the origins, completeness and internal integrity of the material, and also drawing on coherence and consistency between one source another, that is, by the comparing analogue and digital versions.

Though this is a very involved and specialised task, it is very necessary to check for authenticity as this would in the long run help maintain an authentic archive and prevent legal problems. One would not want to be confronted by a barrage of negative criticism from a dissatisfied public, researchers, etc., who would consequently question the authenticity and validity of your archived material, and thus lose confidence in the archives and jeopardise its reputation and usage.

11 DISASTER RECOVERY OF DAMAGED MATERIAL

Disaster recovery of damaged material refers to the salvaging operation in the event of a disaster, for example, a flood, a heat wave, dysfunctional coolers in storage vaults, or fire among others. The practice should therefore be to have a disaster plan and to keep one master copy of each recording in a single storage facility or vault. And another master copy/or equally good copy in a different storage facility or vault or at different location all together, to lessen the chances of losing the master copy and the copy entirely.

The general copies for reference should be made from the original master copies and it should never be permitted for a master copy, even briefly, for reference purposes. Archival master copies should be made as soon as the material is received.

12 RISK MANAGEMENT

The predominant risks inherent to archiving are theft, misuse, damage, deterioration or destruction, among others. People who either work in the archive or use the material for research, study, etc usually perpetrate these acts. This can be countered by practical security measures. Such as the installation of security cameras, tattle tapes (here care must be taken owing to their magnetic character as this can damage the carrier). Highly visible and proactive security, ensuring that users do not bring in devices that would allow them to copy or record data or images, e.g. cameras, tape recorders, video recorders, disks, and so on. When entering and leaving the archival premises there has to be security clearance. And no copying facilities should be available to users in the areas to which they are allowed access. While it is disruptive and intrusive for the ethical user to have staff hovering around in a watchful manner. On the other hand it is important to reduce the risk of unauthorised copying. Copying of a portion of the

work for research, study etc should be allowed in some circumstances. Guidelines as provided by the Copyright Act 98 of 1978 should be used.

For the personnel who have access to the archive, the archive has to have systems and control sheets for booking records in and out of the main archives to the public use area with access codes that will uniquely identify them, the time they were accessed and left the archives. Should there be a genuine reason why a particular record in the archive has to be used outside the archive, there must be a procedure for booking out and the head of the archives must authorise the removal of the recording for a certain period of time from the archives.

The storage facilities should also be well secured from burglary, should be fire proof and waterproof and the facility should further be fitted with automatic fire detection equipment, which should be linked to the fire extinguishing system. While, on the other hand, normal wear and tear can be avoided by making sure that the clients who use the archive use only copies made out from master copies.

The Archive would need to carry out regular shelf and stock takes of what is, and what is not, in the archives, and if it is not there, to find out where it is?

It is recommended that on quarterly, half yearly or yearly intervals, the archive should run audits on the security systems to determine whether the systems are still appropriate and whether they fulfil their objective, and if they need to be changed or improved? It is advisable to invite an independent party, who would objective and has intimate knowledge on how the systems work and what they are meant to achieve, to carry out this audit.

Further, the place of legal deposit must ensure that the broadcast content deposited with them is comprehensively insured. This will help to manage the costs of any restoration efforts in case of disasters that destroy part or all of the collection. It is worth noting that some recordings may be the only copies that exist, so the precautionary measures for their safekeeping should be very stringent.

Risk management should also entail a disaster response and preparedness programme. The archive staff must all be well rehearsed in the disaster response and management procedure to effectively minimise the risks and effects of the particular disaster. Emergency drills for staff preparedness should be regular exercises, so that in the eventuality of a disaster, a larger portion of the archive material could be saved from damage because the staff is calm and know what to do.

13 RELATION S BETWEEN PLACE/S OF LEGAL DEPOSIT, THE PUBLIC, BROADCASTERS AND THE INTERNATIONAL COMMUNITY

Good relations between the places of legal deposit and the public, the broadcasters and the international community will be a work in progress, and where relations do not yet exist, they will have to be developed. These relationships are essential to the proper functioning of a place of legal deposit

The members of the public, as potential regular clients, need to be made aware of the collection, its value, its activities, problems, concerns, needs, etc. So that, as the part of the community it serves, the public will be interested and encouraged to give their support, input and feedback on the way the archive fulfils its purpose.

While the relations with the broadcasters have to be effectively developed and maintained, proper communication channels should be established, especially when it comes to the archive's promotional and marketing activities. This should take into account the interest of the stakeholders and the broadcasters should be involved. Broadcasters will be encouraged to deposit their work if the marketing and promotion of the archive lead to referrals based upon work discovered at the archives. This can even motivate broadcasters to be co-sponsors of other public promotion activities.

International partners are important as they share information on trends, problems, solutions, challenges, etc., and this can extend to funding and exchange programmes. This can be established through proper public relations activities that establish goodwill and attract other partners who wish to associate with the institution.

14 INTERNATIONAL PRACTICE

Australia:

Screen Sound Australia is responsible for the collection of Australia's heritage portrayed in film or sound broadcasts. Currently all the television and radio broadcasts of Australia's Broadcasting Corporation are digitally captured and stored by the archives.

Canada:

In Canada there is a Legal Deposit Act which forms part of the National Library Act of Canada RS 1985-(2) and the National Library Book Deposit Regulation of 1995-(3). The Act and regulations cover all print and non-print publications of every kind, nature and description, which includes documents, paper, record,

tape or any other thing published by a publisher or in which information is written, recorded, stored or reproduced.

The Canadian Broadcasting Corporation and Radio Canada Broadcast Material Archive is the responsible repository for the collection, maintenance, preservation and provision of research and production access to the broadcast material it holds. These deposits are all about broadcasts in Canada or about Canada, and the collection is predominantly in English.

The Canadian Act wisely includes in its scope known forms of media and media not yet known and gives the minister the power to introduce regulations to address changes necessary for the achievement of legal deposit objectives. This is why we suggest elsewhere in this document that South Africa could perhaps adopt a similar approach so that the minister through regulation can make certain pronouncements.

Denmark:

In 1995, the Danish Ministry of Culture recommended an extension of the Legal Deposit Act of 1927-(3) to include print, sound and video recordings, radio and television broadcasts, multimedia products, microforms, static and dynamic electronic publications.

As a result the Legal Deposit Act of 1997-(4) law requires the deposit of all publications in Denmark irrespective of the production technique or carrier thereof. Danish radio and television broadcasts are deposited with the National Media Archive.

Finland:

The Finnish established legal deposit legislation regarding the moving image in 1984, and it is expected that before the end of this year, new legislation will be passed which will extend legal deposit to all material, including radio and television. It is expected that programmes of nation-wide radio and television channels will be recorded by the Radio, Television and Video Archive (RTVA) at browsing quality, while samples of local networks shall be deposited at broadcast quality for one month's broadcasts per year.

The Finnish criterion for the selection of programmes is based on the national cultural and historical significance of the broadcast in order for it to qualify for archiving and preservation. So a selective criteria approach is applied for basic practical reasons of cost, space, staff, and so on. It is also expected that there will be co-operation between RTVA and the stakeholders, i.e. producers, TV and radio companies, university departments of film, television, media or communications, scholarly associations, and scientific and cultural organisations.

France:

The French are the pioneers of legal deposit with an act that was instituted in 1537 for the deposit of books by the printer. Currently, French publishers are required to deposit all printed, graphic, sound, audio-visual and multimedia material, whatever the technical means of production, as soon as they are made accessible to the public with the publication of a physical carrier. The previous statement 'whatever the technical means' covers radio and television. There are five public radio channels and six national television channels that deposit their broadcasts at the *Institut National de l'Audiovisuel*.

Germany:

The German practice is to leave the collection of the public radio and television broadcasts to the archives of the respective institutions and this applies even to Germany's independent broadcasters. The public has the right to access the public archives at any reasonable time.

Italy:

In Italy all documents produced and intended for public enjoyment through reading, listening or sight, multi-media documents, sound and video recordings, film material and radio and television broadcast programmes are to be preserved by the *Biblioteca Nazionale Centrale*. The Italian approach is selective in the collection of material for deposit by the broadcasters.

Netherlands:

The Netherlands approach is different to all the other countries investigated as they have a voluntary deposit system on print publications which has worked very well and they are extending the same voluntary system to electronic publications. Before 1997, public broadcasters had in-house archives, but thereafter the archives of the 28 public broadcasters were centralised. In 1999, the Netherlands Public Broadcasting, in co-operation with NOB and the Netherlands Institute for Sound and Vision, came together to establish an integrated digital archive. Currently using IMMIX, the Netherlands has created a virtual archive which integrates their National Archives, the Broadcast Archive, Fonotheque, the Film Archives, the Media Museum and the Knowledge and Expertise Centre.

Norway:

The stated objective of the Norwegian legislation is to take into account broadcasts from Norway's national radio and television broadcasters, while private radio and television broadcasts are to be deposited only upon special request by the place of legal deposit. This is an open act, which allows the place

of legal deposit to demand from private broadcasters at any given time the deposit of particular records irrespective of format or carrier. One copy of broadcast material is deposited with the National Library Rana, and since this legislation came into effect in 1990 more than four hundred thousand hours of broadcasts have been deposited.

Russia:

In the Federated Republic of Russia, the responsibility for archiving broadcast material lies with the Motion Picture, Broadcast and Recorded Sound Division, which has systematic holdings of broadcast material as early as the mid-1970s. The collections include videotapes of television news, documentaries, feature documentaries, and selected regular and special programs.

Slovenia:

Slovenia is one of the countries that have archived its broadcast material since the inception of radio in 1928. Of Radio Ljubljana and Radio Free Ljubljana in 1945. And of television in 1957. The archives and documentation service collects and classifies programs produced by Slovens radio and television. The Slovens archives have been well organized and they have a complete register of all programmed that have been broadcasted ranging from the experimental programs of 1957 to the regular programmed of 1958 onwards.

Spain:

The Spanish *Biblioteca Nacional* has prepared a revision of the law that would incorporate for legal deposit the preservation of printed, graphic, photographic, sound, audio-visual and multi-media material irrespective of the technical means of production, publication or distribution.

Sweden:

The 1978 Statutory Deposit Act- (5) established the National Archive of Recorded Sound and Moving Images whereby certain video and audio recordings were included, for legal deposit and preservation, and this includes certain TV and film programmed. This, in essence, indicates that the Swedes apply selective criteria in collecting and preserving broadcast material.

Switzerland:

The Swiss have no federal law on legal deposit, though the Library has a statutory responsibility to collect, catalogue, and conserve information in any medium or format concerning Switzerland and to ensure that the information is accessible to the public.

United Kingdom:

The collection, archiving and preservation of broadcast material in the United Kingdom have over the years been left to the respective broadcasters, and the British National Sound Archives exists for sound broadcasts. Moving images are the task of the British Film Institute. These institutions have selective collections of broadcasts, which were voluntarily deposited. And what they could source from the broadcasters per request or arrangement.

But the complete range of the programs are held by the respective broadcasters and access by the public for research or study purposes is restricted, unless the material in question is also available at the British film or sound archives then the public can access it at this archive.

In 2004, the United Kingdom government formed a committee to consider the establishment of a national archive for published heritage in the UK, but surprisingly broadcasts were not part of the consideration for legal deposit and preservation. Thus, what exists at the moment is an off air archival acquisition of selected broadcasts.

The British Broadcasting Corporation is one of the oldest broadcasters in the world and has a ten-year plan to digitize all archival assets, but new broadcasts are mostly in digital form.

United States of America:

The United States legislation requires the mandatory deposit of all material, without exemption. Therefore all material that is protected under copyright in the United States is deposited with the Library of Congress- (6). The Library of Congress has been collecting and preserving motion pictures since 1894. And has been collecting and preserving broadcasts made for television since 1949 although the broadcasts are admittedly not consistent over the years as a result of various factors. For example the fact that copyright did not exist in a broadcast material it did not have the fixation element which then qualified a work for copyright protection and eventual deposit with the library of congress. As a result most of the broadcasts failed to be deposited with the library of congress. But currently the deposit of non- print material is covered by the 1993 code of federal regulations- (7). The Library of Congress has a collection, however, which represents a conscious endeavour to preserve the nation's heritage in good condition, including TV series, films, entertainment, news, etc.

The Library of Congress is in the process of digitizing all its library holdings and this obviously includes broadcasts.

All the good practices outlined above should be contained in the policy and strategy document. This policy and strategy document should be the guide to the daily activities of South Africa's broadcast archives, so that it can achieve its objectives and obligations therefor becoming one of the best archives in the world and be a point of reference among its peers.

15. RECOMMENDATIONS

There is need, in the meantime, to introduce an amendment to the existing legislation, for example, the current legal Deposit Act 54 of 1997 and the Copyright Act 98 of 1978. To include clauses that create an enabling environment for the archives as they embark on the active preservation of the national heritage. An example thereof would be the following:

"Every broadcaster in the Republic of South Africa or elsewhere who broadcasts any work to the South African public. Which work has a heritage value ("heritage" shall be defined in keeping with the guidelines provided by the Heritage Resources Act 25 of 1999) either by a diffusion service, satellite or by any other technical means now known or yet known. Must deposit such work with national repository within one month from the time when such work was broadcast to the public."

And:

"The place of legal deposit shall without violating the Copyright Act make full or partial copies. Or transfer recorded data into another format of material collected in its premises for preservation purposes. And it shall be required of the place of legal deposit in the process to maintain the authenticity of the records as much as is technically possible."

This report puts forward the best possible approaches for the preservation of South Africa's broadcast heritage for posterity. This report is to act as a guideline in the implementation process, whichever approach is taken, and it also calls for collaborative efforts among all the stakeholders especially in the first phase of its implementation. There may be a need for an active consultative process between the repository and any stakeholder/s who already has/have a working version of the system. That the repository will eventually choose to install for preservation of broadcast material to share their advice and experience with the repository as it implements the system, this must be done without compromising any ethical issues.

Another area where there will be need for closer cooperation from the outset is with the classification and cataloguing of the material insofar as a standardized system for all broadcasters has to be adopted in accordance with the selected criteria. As a result, this will make access to the material very easy and user

friendly for staff, broadcasters and members of the public who need access to the collection.

The initial imperative would be for the National Department of Arts and Culture, in conjunction with the repository, to develop, in line with this report, and its recommendations. To develop policy and strategy to guide the implementation process and to inform the stakeholders and the public of the proposed approach to the collection, storage, preservation of, and access to, the country's broadcast heritage and all other ancillary matters should be addressed.

On the other hand should the Department and repository realize that the stakeholder/s would not be able to meet their obligations to deposit as a result of the implementation of the chosen deposit system for various reasons i.e. costs, technical, resources etc. Then the Department and the repository might consider a suspension of the deposit obligation for a period of time until all stakeholder/s are able to comply.

In considering the particular system to adopt regard must be given to the most popularly used system by the most of the stakeholders so that there is little inconvenience to the stakeholders. And for those stakeholders that have no compatible systems, the repository shall in the meantime accept the deposits in the format that the broadcasts are produced while they give the particular stakeholder/s a reasonable time in which to comply with the required standardized format of deposit.

There will also be need for the repository to constantly keep up with the changing technology and in tandem with the broadcasters in that the systems can be "talking" to each other at all the time. This calls for an enduring consultative forum between the repository and the broadcasters, which will always keep each party abreast of the changes in the industry. What the broadcasters' intentions are, or what the repositories' intentions are and how those intentions will affect the existing arrangements and what needs to be done.

As a measure of preparation, the repository shall need to either hire new staff well equipped to implement and maintain the repository digital network, or to retrain the existing staff to handle the implementation and maintenance. Furthermore, there will be a need for continuous training so that the staff is empowered to adapt and use any new technology.

There also needs to be a progressive program to address what has not been collected in the past. It is always easy to start with as clean slate. But it is imperative for the sake of completeness for there to be a complete collection of broadcasts made at significant moments in South Africa's past and about South Africa's people.

This will make an invaluable contribution to the repositories collection and redress the past. In this regard notices should be sent to institutions or individuals that have such works to urge them to make voluntary deposits of copies. Or make them available to the repository for the repository to make copies or in certain circumstances for the copies to be purchased, or for the cost of copying be borne by the repository. Internally, there will be need to re-channel resources for the implementation process and, externally, the national government has to allocate sufficient resources for the installation, implementation and maintenance of the digital repository.

There is, therefore, a need to establish a comprehensive digital archive by the National Film, Video and Sound Archives. Our consultations with the stakeholders and questionnaires completed by the stakeholders revealed that most of them do currently produce and archive their work digitally, and that those who have not yet moved over to the digital system are in the process of acquiring/upgrading to digital systems/formats. Hence the place of legal deposit has no option other than the establishment of a digital archive. In their choice they should establish a digital archive system that is an “open standard one”, which allows for adaptation to shifts in technology, need for increase in storage capacity, preservation needs and accessibility of technology.

1. Key principles

Comprehensiveness

1. A dedicated institution like the National Film, Video and Sound Archives should be assigned as the institution that is solely responsible for all the collection of the broadcast material in the country. And should develop into a center of excellence in the preservation of digital material, unlike the Spanish practice where this exercise is left to the discretion of the broadcasters.
2. All broadcasts which are made in South Africa or outside South Africa which have an enduring artistic, intellectual, political or cultural heritage value to the nation must be deposited irrespective of the carrier or format.
3. Deposit should take place within one first month of broadcasting, and the best copy should be deposited.
4. All broadcasts deposited should be complete and in a physical condition acceptable to the repository.
5. Where requested by the repository, the broadcaster may need to supply appropriate complementary material related to the

broadcast, e.g. posters, stills, publicity material, etc.

6. To enable the archives to fill gaps in the existing archival holdings, the archives should have the right to request access to material from the past or on loan for purposes of copying it for future preservation.
7. The archives should be allowed the possibility of acquiring by purchase, exchange, and donations other valuable material that is not covered by the guidelines as to what is to be deposited (should a selective system be adopted).
8. There needs to be a follow up investigation into electronic media, for completeness of the collections, since our investigation into radio and television exposed us to the fact that some broadcasters publish their broadcasts in the electronic media, internet, I-pod. Mobile- phones etc.
9. The process of collection may not be retrospective, but for the sake of completeness, in certain instances. The place of legal deposit should be able to call upon a broadcaster to bring forth a/certain broadcast/s from the past which makes the collection more complete, e.g. if the broadcast has been a series, or a documentary developed in parts.

Notification

1. Every time the repository needs to make a copy of material in its care for continued preservation and access by the public, the repository need not notify the copyright owner.
2. The repository should have the right to play or show any material on its premises or any other location designated by the repository for cultural, educational, heritage or research purposes.
3. The depositor should inform the repository of any material that is access protected by means of encryption and the depositor must give the access code to the material to the responsible official at the repository.
4. There should be legislation that allows the Minister by notification in the *Government Gazette*, after appropriate consultation, to declare certain modes of new broadcast media that will emerge as subject to legal deposit.

Exemptions/ no exemption

1. Nobody is exempted from depositing broadcast material considered to be of national heritage unless the Minister exempts such deposits.
2. No organization whether public, commercial or otherwise is exempted from depositing broadcast material unless the Minister exempts such deposits.
3. International broadcasters must be given specific guidelines and clearances before they start commissioning any project which when broadcast would require them to make deposits thereof. These broadcasters should be able to ascertain and make informed decisions from the guidelines the heritage and cultural value of any object, person, site etc to the country.
4. Because of the cost element, private broadcasters should be exempt from depositing everything that they broadcast (should a non-selective system be put in place) for the collection of archive material. And the place of legal deposit should be granted the power to call upon any private broadcaster to deposit specific material with the repository should the material fall into the category that has to be deposited into the place of legal deposit. This is if the broadcaster is not coming forth to deposit such material.

Payment/ non-payment

1. The broadcaster should be obliged to deposit the material at a place of legal deposit at no cost to the archives/ repository unless the Minister directs otherwise.
2. The repository should establish a trust fund for monies raised from selling the rights to broadcasts to third parties where the rightful owners could not be traced after a prescribed period of time. Until they are reasonably satisfied that the right holders do not exist, then that money can be utilized for activities in the repository.

Also, this trust fund shall act, as a source of money to pay to the right owners should they eventually come forward or be found, within a stipulated period when they can still claim the money held in trust. It would also be a show of genuine effort on the side of the repository to benefit the owner of the rights. Further it will assist the place of legal deposit to meet any legal costs, as there may be owners who may institute legal proceedings against the repository for one reason or another.

Number of copies to deposit

The broadcaster must deposit one permanent copy and the repository be allowed to make copies from the master copy for access, backup, security and preservation.

Selection

1. Repositories have the discretion to accept or reject material that is offered for deposit in certain cases, i.e. that it does not meet established criteria/ guidelines.
2. The repository must ensure that the broadcast is complete, the correct version, undamaged, in the required medium and format, functional and error free and not copyright protected.

2. Responsibilities of the repositories

1. The repository should develop a policy and strategy document, which encompasses all aspects of the repository from collection to disposal.
2. Develop and maintain the required standards of storing, maintaining, preserving, cataloguing and classifying which are feasible for the broadcasters and easy to access by the public.
3. The repository may request copies of a particular record /material to be delivered to a designated place
4. The repository is obliged to notify the broadcaster to deposit a particular work shown/ published/ played within a particular time frame.
5. The repository must ensure a comprehensive scope in relation to all broadcast material in whatever medium known or yet to be invented.
6. The repository must together with all stakeholders develop model cooperation and coordination agreements, which should govern their relations.
7. The repository should also see to it that they develop various

agreements that will govern the relationship/s that it may develop with various entities.

8. The place of legal deposit should ensure that the material in its custody is comprehensively insured against all insurable disasters.

3. Copyright ownership

1. Despite the repository having perpetual, uninterrupted physical possession of the deposited material, copyright of the work still vests with the copyright owner.
2. In the event of a third party needing to use the deposited material or recording beyond the allowed premises, the National, Film, Video and Sound Archive should endeavour to liaise between the copyright owner/ estate of the copyright owner and the third party. Where the copyright owner/ estate of the copyright owner is not known to the National, Film, Video and Sound Archive. Then the latter should act as the copyright owner (any proceeds raised by the repository from works to which the copyright owner is not known shall be used for the preservation objectives of the repository.). The repository in the long term will have to explore the possibility of establishing a trust fund. That will address instances whereby after proceeding with the exploitation of the work and possible appropriation of the proceeds, on the assumption that the copyright owner/s or the heir/s thereto cannot be found, then thereafter appear and demand compensation for the exploitation of their work.
3. Where copyright has lapsed in a work, but the work falls into the protected category because of its heritage value, the copyright in such a work should pass to the state under the custody of the repository.

4. Collaboration agreements

1. There should be an inter-departmental and departmental/ private collaboration arrangements in mapping out departments or private entities that are engaged in the same activities of archiving the nations treasures, so that unnecessary duplication of resources is avoided in trying to achieve the same objective.
2. The National Film, Video and Sound Archives must enter into collaboration agreements with other recognised international archives. This can help facilitate the exchange of deposited

material, at least between official archives, without infringing international conventions if it is for certain fair use purposes and if the receiving institutions are not allowed to make further copies. Ideally, such an exchange could be arranged through an inter-archival loan system. Exchange might also be necessary for practical reasons to avoid the restoration of copies in one country when it is believed that these are the only ones whereas better ones exist in another country.

3. Further according to the same guidelines, the National, Film, Video and Sound Archives can loan certain single items outside their premises to institutions of strictly non-commercial character. Apart from research, educational and cultural institutions this also includes the country's diplomatic missions in order to permit them to make the country's cultural heritage known abroad. The archives should do so for promotional purposes only, and not for the commercial exploitation of the work.

3. It would be imperative upon the place of legal deposit to make long-term arrangements with the broadcasters, to collaborate to create awareness of the existence of the material in the place of legal deposit. And the insight gained at these awareness forums will increase the various categories of people who want to visit these places for their heritage value, research value, educational value, intellectual value, artistic value etc. will increase. This awareness can be organised by all the stakeholders in the form of regular well-publicised exhibitions, workshops, etc. This should be made accessible to all facets of society. In the long run there will be a high demand for use of the material in the archives.

As a result there will be more revenue generated for the place of legal deposit and the broadcasters, as their works will gain exposure and be used as footage in films, for background information, stills, new documentaries etc. The general principle applies, if you "create awareness of its existence, people will find ways of using it, if it is not known it does not exist".

5. The place of legal deposit has to enter into collaborative agreements and exchange programmed with other leading countries in the field of archiving whereby staff, expertise, technical information etc are exchanged between the various institutions to impart knowledge about new developments and innovations.

6. The place of legal deposit must make arrangements with the broadcasters on issues of selection, classification, cataloguing and marketing.

16. BIBLIOGRAPHY OF REFERENCE CITED

- 1 Weaving (1991) -(1)
- 2 Copyright Convergence Group of Australia, National strategy for provision of access to Australian electronic publications, <http://www.nla.gov.au/policy/paep.html>-(2)
- 3 Plan for preservation of Norwegian sound recordings, Stavanger, Norway 1997. 29 – 30- (3)
- 4 National Digital Preservation Initiatives: An Overview of Developments in Australia. <http://www.clir.org/pubs/reports/pub116/sec3.html>
- 5 Hafner, Risnyovzky, and Schuller. Low cost digital archives, a small scale approach to digital audio archiving-(4)
- 6 Adrienne Muir ,Legal deposit of digital publications: A review of research and development activity(5)
- 7 Highways to change: copyright in the new communications environment. Canberra AGPS, 1994. P7-(6)
- 8 Birgit Kofler, Legal issues in audiovisual archives,<http://www.unesco.org/webworld/ramp/html/r9704e09.htm>-(7)

TABLE OF STATUTES AND INTERNATIONAL DOCUMENTS

Canada

- 8 National Library Act of Canada RS 1985- (1)
- 9 National Library Book Deposit Regulation of 1995-(2).

Denmark

- 10 Legal Deposit in Denmark Act 423 of 10 June 1997-(3)
- 11 Legal Deposit Act of 1927-(4)

Sweden

- 12 Statutory Deposit Act of 1978-(5)

United States of America

- 13 Section 407 of the Copyright Act of 1976 Title 17 USC-(6)
- 14 Code of Federal Regulations of 1993 (7)

South Africa

- 13 Broadcasting Act 4 of 1999-(4)
- 14 Constitution of the Republic of South Africa Act 108 of 1996(2)
- 15 Copyright Act 98 of 1978-(6)
- 16 Legal Deposit Act 54 of 1997-(1)
- 17 National Archives and Record Service of South Africa Act 43 of 1996-(5)
- 18 National Heritage Resources Act 25 of 1999-(7)
- 19 Promotion of Access to Information Act 2 of 2000 (PAIA)-(3)

International documents

20. Berne Convention for the Protection of Literary and Artistic Works (Paris, 1971)-(1)
21. UNESCO General Conference on Preservation of Moving Images 1980-(2)
22. WIPO Copyright Treaty (Geneva, 1996)-(3)
23. WIPO International Convention for the Protection of Performers, Producers of Phonograms and Broadcasting Organizations (Rome, 1961)-(4)
24. www.unesco.int – (5) (examples can be found under project).
25. www.fiatifta.org-(6)