

## Managing records in networked environment using EDRMS applications: a case study of Rand Water

Pertunia Mohlabi, Jannie Ferreira, Vincent Mello, Tebogo Mile and Lesetja Maraba  
Rand Water, South Africa  
[pmohlabi@randwater.co.za](mailto:pmohlabi@randwater.co.za);  
[jferrei@randwater.co.za](mailto:jferrei@randwater.co.za);  
[vmello@randwater.co.za](mailto:vmello@randwater.co.za);  
[tmile@randwater.co.za](mailto:tmile@randwater.co.za);  
[lmaraba@randwater.co.za](mailto:lmaraba@randwater.co.za)

### Abstract

*Rand Water was founded in 1903 at the conclusion of the Anglo Boer War and has a very rich history as an organisation. Founded with the sole purpose to provide clean water to domestic and industry needs in the greater Johannesburg and Witwatersrand area, at that time, it then became part of the bigger body of bulk water supply entities in 1997 as guided by the Water Services Act of 1997. In consideration of the date that Rand Water was founded, its records pre-date it by ten years as its oldest archives date back to 1893 with correspondence about the setting up of smaller, fractional water supply authorities. Evolution of the organisation as it grew brought new ways of managing its records and archives. The impetus towards new approaches to managing records and ensuring archival compliance in accordance with standards was propelled by the relevant legislation as approved by Government and internationally adopted standards. This article is based on the experiences of the authors and attempts to navigate through the records management and archival story of Rand Water representing water sector challenges and opportunities that organisations such as this are faced with in consideration of the ever-improving technologies and strategies at their disposal.*

**Key words:** electronic records, electronic document and records management system, Rand Water

### Introduction

The existence of organisations in categories such as Rand Water is interesting and challenging. Rand Water runs a business that produces a product that no living being can live without; its product is thus indispensable. The product is regulated by the Government of South Africa through its acts and legislation signed and adopted by Government through its Parliament. In the case of Rand Water, the Water Services Act of 1997 guides and endorses its existence and its operations. Similar principles apply when it comes to how Rand Water ought to manage and archive its records. The setup was different when Rand Water enjoyed a fair amount of independence also in as far as governance of its records management function was concerned. However, with the passing of the Water Services Act in 1997 and Rand Water's subsequent incorporation into the greater family of bulk water suppliers, its records management function became aligned with the provisions of the National Archives and Records Services of South Africa Act, No 43 of 1996, as amended.

This paper intends to elaborate on the records management and archiving of Rand Water's story through the lens of an archivist, records manager and IT specialist in attempt to align to the latest practical and effective approaches.

### Brief background of records management at Rand Water

In view of the historical account on the evolution of the Rand Water archiving and records management function, it can be appreciated that the system of record keeping was simple and elementary. Files

were numbered from 1 and number reservations were used to 'block off' a group of similar subjects. Typically the first files contained take-over documentation, legal opinions pertaining to the latter, initial logistical arrangements for the setting up of the organisation, its personnel complement, funding, loans etc. In order to create more space in the system, the alphabet was also utilised in conjunction with numerals, for instance 25/A, 25/B, etc. In case of case files having to be opened, a file number could be used in conjunction with the alphabet, for instance under potable water supply the number was 31. Should the municipality be Boksburg, the number would be 31/B/1, while a similar file for Brakpan would be 31/B/2.

This particular system was quite successful, due to the diligence of the records staff meticulously recording each incoming letter into a register of incoming mail, detailing the date of receipt, date of the letter, the name of the sender, name of recipient, subject and external reference number where applicable. A similar register of outgoing mail was used for correspondence being dispatched, containing the same categories of information above. An alphabetical index card system cross-referencing the file numbers assisted in the speedy tracing of files from the file cabinet. A further enhancement to this was the daily manual listing of files in offices, enabling the Records Department staff to trace files required for placing of correspondence. A unique management tool was the so-called list of correspondence outstanding longer than six weeks, assisting management in ensuring that correspondence was dealt with within a space of no longer than six weeks. Space was allowed to motivate any periods of execution taking longer than six weeks. A system of inter-site movement of postal items called the 'pony' was established which is still in use today. Old records show that periodic disposal of old, obsolete files were carried out.

## **Quality management standards and National Archives**

Since Rand Water's establishment in 1903 its records management function was centralised at its head office, with satellite records systems feeding into the corporate system. This is still the case today, with the ISO 9001:2008 quality management system and its associated annual audits, ensuring quality control (Rand Water Annual Report, 2012/13).

Among the factors that influenced records management compliance with the government regulations and legislation was the Rand Water's move to a new building outside the city centre of Johannesburg in 1988. Its archives dating since foundation up until 1975 then were transferred to the Johannesburg Records Centre. This action meant a total revamp of the records filing system implementation and conformance to the principles and guidelines of the National Archives & Records Service of South Africa (NARS). The records file plan was registered with NARS, but a longstanding legal issue between NARS and the state legal advisors regarding the applicability of the NARS Act to parastatals such as Rand Water, resulted in some delay in finalising the actual file plan. However, the guidelines and regulations with regard to the implementation of the file plan were followed as good practice in any case.

## **Emergence of technology**

In 1991 the computerisation of Rand Water's records management systems kicked off, using Ghostwriter as a platform. The system development was done in-house by Rand Water's IT Department, with inputs from the Records Management Department. This system however, was not very user-friendly in the Rand Water landscape and a few years later, another system was developed in-house, called File Tracking System (FTS). Information captured on the system included the following:

- Incoming correspondence: company name, sender, date of despatch, date of receipt, subject, reference numbers, etc
- Outgoing correspondence: company name, sender, date of despatch, subject, reference numbers etc.
- Listing of items outstanding longer than six weeks
- Repository of all incoming correspondence subjects

File tracking functionality was quite a unique feature at that stage, enabling staff members to forgo the manual process of listing files in offices by using hand-held scanners which were linked to the central computer system and then updated and downloaded twice a day, allowing staff to trace and track files needed for administration and records purposes. This system caused quite a stir in its heyday in the 1990s in South African records management circles.

In the myriad of technologies at Rand Water's disposal, there still remains a challenge in the adaptation and alignment to the operations of Rand Water as a state owned entity. In the same context, in consideration of the initiative such as going green and other related environmental legislation is equally important in the current time of modernisation. Global trends also have a major influence in how an organisation in South Africa ought to map its operation and related processes in records management and archival solutions. It also brings to surface related challenges such as integration of business units in archiving strategic objectives through records management and archiving of records. In the context of Rand Water, this paper seeks to focus on non-electronic records (hardcopies) that are of great value to Rand Water assets and designs that are vital to the very essence of its existence. The challenge is one of transcending the seamless process of ensuring that records management, information management and archiving activities are synchronised and effective leveraging on suitable technology

that integrates with the existing Information Technology systems in Rand Water.

## **Rand Water archival museum project**

In conjunction with this paper, Rand Water is embarking on setting up a water technology museum that aims to collect items and artefacts related to its development since 1903. Apart from the typical museum-related objects, it will endeavour to showcase the paper format records that were significant to building Rand Water to be what it is today. These records include milestones achieved and related policies and technologies. Though the project is at its initial stages, progress has been made and upon completion it is envisaged that the elements that make up an organisation's heritage will be brought together under one roof, that is its historical objects, machinery, records, photographs, drawings and related documents that will be made available for further research as part of the greater Rand Water knowledge hub. The journey of reaching success rests upon the lessons learnt and implementation approaches. It is envisaged that the culmination of this project would magnify the importance and the value of technological adaptation of records management and archiving in Rand Water and beyond.

## **The problem**

Rand Water, being over 112 years in existence, has historical records that are still important and remain vital input factors to the current practices and technologies already in place. Though the records are not consulted on a daily basis for daily operations anymore, they are as crucial to the organisation for the current and the future operations of the organisation. In consideration of the infrastructure of Rand Water, it is to be noted that some of the pipelines were laid more than 50 years ago ([www.randwater.co.za](http://www.randwater.co.za)). Information about

the contracts, servitudes, drawings, designs and legal documents related to the agreements reached, remains critical to this day. Similarly, to records pertaining to investments should remain for the period as stipulated in the relevant contract. Rand Water ought to secure and effectively manage its existing records that are not in an electronic state as well as in a paper format. In some instances it has been observed through communication on email that some files relating contracts change too often and tracking them remains a challenge (email communication, 2013). The other challenge facing most companies in the world is based on identifying themselves with the best and suitable solution to effectively archive and manage their records in a best fitting strategy leveraging on the technology.

The question facing Rand Water is:

*How should archiving and records management be adapted to the latest technology to best achieve Rand Water business objectives without compromising its legacy?*

Based on the question stated above, sub-questions that would contribute in reaching an answer to the main question could be the following:

- Which categories of records exist in Rand Water that remain relevant to its business, based on the archival story?
- What challenges and opportunities does records management and archiving present to Rand Water and its operations?
- In consideration of a myriad of technologies and global trends, what technology is best suited to effectively and efficiently enable records and archiving strategy in Rand Water?

These questions are considered key in an attempt to address the legal challenges faced by rand Water in managing its records. The question would be answered in consideration of assumptions and limitations in the context of Rand Water business.

## Conclusion and way forward

This paper explored the historical account of Rand Water's records management since its inception to date. The paper has identified two main challenges in managing records at rand Water. The first challenge relates to whether Rand Water falls under the auspices of the NARS Act. Even though this question has not been answered, Rand Water still uses guidelines provided by the NARS to manage its records. The second challenge relates to the emerging technology that impact on the management of records.

In order to address these challenges, a team of archives and records management professionals from Rand Water embarked on an InterPARES project coordinated by the Department of Information Science at the University of South Africa of managing archival records ready for transfer to archives repository. The aim of the project is to assess the recordkeeping environment within Rand Water from both legal, as well as technical perspectives and then develop the appropriate archival environment for the institution's electronic records.