



Securing Nuclear Data for the next centuries

Empresa Nacional de Residuos Radiactivos, SA (ENRESA) is the organisation responsible for nuclear waste management in Spain, conserving and managing all documentation relating to radioactive waste, dismantling of nuclear facilities and associated activities.



CHALLENGE

The nuclear industry has stringent requirements for the safe decommissioning and disposal of waste and nuclear plants, due to the potential for harm through mismanagement.

A key part of this is effective information management to ensure the information is accessible in the future. Documents relating to sites that store nuclear waste are required to be kept throughout the lifetime of the waste generated, which in many cases is over 100 years.

It's critical that future generations have access to information about the site status to prevent potential risks concerning decommission sites and waste locations to allow them to make informed decisions and

“ The goal of Enresa’s Information Managers is to leave the most valuable data in the best possible way for next generations of users and Piql guarantees this vision.

María Sáenz de Miera – ENRESA’s Archive Manager

to avoid inadvertent intrusion. Access to this information can also assist decision making on the possible reuse of the site, its contents and surrounding controlled areas.

Unfortunately, traditional digital storage mediums cannot guarantee the secure and reliable conservation for information over such long periods. The rate of technological evolution means that information must be moved to newer devices, platforms and mediums after just a few years. Over time, this becomes expensive and risky, especially for static information that needs to be kept verifiably authentic.

This is a shared challenge for many organisations, like ENRESA, who have critical information that must be stored for long periods.

For optimal records management, ENRESA stores data in archival format, with metadata in an online records management system.

A duplicate of these records is made periodically to ensure recovery in case of contingencies. The possibility of storing the information in another way for long-term preservation has been of interest to ENRESA.

SOLUTION

Piql’s unique approach to long-term digital preservation is perfect for data that needs to be kept for decades or even centuries.

By storing the documents digitally on repurposed photosensitive film, data can live on well into the future. All file specifications and program code are stored with the files, meaning that the data can always be accessed and will never need migration due to obsolete technology. It also means that data is stored in original, authentic form and cannot be changed or deleted once stored, ensuring verifiable authenticity of the information.

Piql is completely compliant with international information storage guidelines and shines against other mediums when it comes to longevity and authenticity. In particular, this project followed the EU eARK guidelines and the Spanish Administration metadata dictionary (eEMGDE) and electronic document standard (NTI).

ENRESA chose Piql for a pilot project, to investigate the possible benefits of large-scale application of Piql’s technology and services.

For the pilot project, pdf/a documents were stored on piqlFilm, showing how the quality of the information is maintained and how files can be restored without risk of data loss or corruption. In addition, the information was also stored in visual form to demonstrate the unique offering of Piql in double assurance of future access.

FUTURE

The objective of pilot project is to show the Piql technology in real customer data and provide it with elements that allow it to analyse and evaluate the technical feasibility of preserving its digital data with Piql.

Following a successful pilot project, where ENRESA experiences the viability of the technology and its application to the organisation, Enresa and Piql are confident of the opportunity to deliver services on a larger scale.

FOR MORE INFORMATION, PLEASE CONTACT US AS:

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