CURRENT STATUS OF THE IAEA'S NET ENABLED WASTE MANAGEMENT DATABASE

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ABSTRACT

The International Atomic Energy Agency's Net Enabled Waste Management Database (NEWMDB) contains information on national radioactive waste management programmes and organizations, plans and activities, relevant laws and regulations, policies and radioactive waste inventories. The NEWMDB, which was launched on the Internet July 6, 2001, is the successor to the Agency's Waste Management Database (WMDB), which was in use during the 1990's. The NEWMDB's first data collection cycle took place from July 2001 to March 2002.

Agency Member State participation in the first data collection cycle was low – only 22 submissions were received. However, the first data collection cycle demonstrated that:

- the NEWMDB could be used to collect information on national radioactive waste management programmes and radioactive waste inventories annually,
- the NEWMDB data can support the routine reporting of status and trends in radioactive waste management based on quantitative data,
- the NEWMDB can support the compilation of a consolidated, international radioactive waste inventory based on a unified waste classification scheme,
- the data needed to compute an indicator of sustainable development for radioactive waste management are available at the national level,
- NEWMDB data can be used to assess the development and implementation of national systems for radioactive waste management, and
- the NEWMDB can support the reporting requirements of the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management.

Agency Member States that had not made data submissions in the first cycle were asked to submit data during an extension of the first cycle (July 2002 – January 2003). When this paper was written, the Agency had conducted two of three international workshops to provide training for future NEWMDB data collection cycles and to compile lessons learned for the first data collection cycle. A third workshop was scheduled for January 2003.

This paper provides an overview of the status of NEWMDB data collection with a focus on NEWMDB reports, which are publicly available cost free.

INTRODUCTION

Over the last one to two decades, the evolution of radioactive waste management has focused on the development and implementation of technological solutions to problems. From the mid-1990s onward, there has been an ever increasing focus on non-technical aspects of radioactive waste management [1]. Of note, radioactive waste managers are increasingly interested in informing their stakeholders (one definition of a stakeholder is anyone who declares him/herself to have a vested interest in radioactive waste management).

In 1998, the European Commission (EC) conducted a survey to determine the interest, knowledge and feelings of European citizens about radioactive waste and its management [2]. The survey asked questions in five areas:

- how well do people think they were informed about radioactive waste,
- what is their level of knowledge about radioactive waste management,
- what is the public's views on different aspects of radioactive waste management,
- what are the opinions related to geologic disposal of high level and long-lived radioactive waste, and
- which generation, present or future, should be responsible for decisions on waste disposal and what is the possible role for the European Union in this area.

How well informed does the average European citizen think he/she is informed about radioactive waste? The answer, not very well. How much do European citizens actually know about radioactive waste? The answer, not a lot [3].

A recent report by the Union of the Electricity Industry (Eurelectric), entitled "Nuclear Power Plant's Radwaste in Perspective", provided an overview of the management of radioactive waste from nuclear power in 14 European countries [4]. The report stated:

> "*…The basic problem concerning radwaste from nuclear power plants seems to be mostly a political one, which originates from the lack of public support in some countries. This area must certainly be improved and better and honest communication is strongly recommended to obtain public acceptance… ... Public information should be reinforced to improve the public perception and political support."*

The Agency attaches a high importance to the dissemination of information that can assist its Member States with the development, implementation, maintenance and continuous improvement of systems, programmes and activities that support the nuclear fuel cycle and nuclear applications. Article VIII of the Statute of the Agency, entitled "Exchange of Information", states:

> "*A. Each member should make available such information as would, in the judgment of the member, be helpful to the Agency.*
>
> *B. Each member shall make available to the Agency all scientific information developed as a result of assistance extended by the Agency pursuant to Article XI.*
>
> *C. The Agency shall assemble and make available in an accessible form the information made available to it under paragraphs A and B of this article. It shall take positive steps to encourage the exchange among its members of information relating to the nature and peaceful uses of atomic energy and shall serve as an intermediary among its members for this purpose.*"

The Agency's Medium Term Strategy [5] states:

> "*The challenge for the Agency in the medium term is threefold:*
>
> - *to understand how the needs and interests of Member States are changing so as to be able to respond by focusing on the appropriate nuclear technologies;*

- *to contribute to the objective assessment of the use of nuclear technologies and to assist Member States in the safe application of those technologies that continue to have a comparative advantage;*
- *to play a catalytic role in the international effort to maintain and increase knowledge, understanding and expertise in the nuclear field, particularly through the collection and dissemination of scientific information and the transfer of technology."*

The above indicates the keen interest that nuclear power providers, the EC and the Agency have in the dissemination of information to the public and other stakeholders. In addition, it indicates the importance of timely and reliable information to support Agency activities that serve the needs of its Member States.

The NEWMDB is the Agency's principal mechanism for the collection and dissemination of information about radioactive waste management programmes and activities and radioactive waste inventories in its Member States. The dissemination of information is carried out both inside and outside of the Agency.

The principal objectives for developing the NEWMDB were to:

- support the routine reporting of status and trends in radioactive waste management based, to the greatest extent practicable, on quantitative data rather than anecdotal information [6] and [7],
- support the compilation of the inventory of radioactive waste in Agency Member States based on a unified waste classification scheme [8] and [9],
- support the development, implementation and use of an indicator of sustainable development for radioactive waste management [10] and [11],
- provide the means to assess the development and implementation of national systems for radioactive waste management in Agency Member States [12], and
- conform, to the greatest extent practicable, with the reporting requirements of the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management (Joint Convention) [12] and [13].

BRIEF OVERVIEW OF THE NEWMDB

The NEWMDB is an Internet-based application that was developed between mid-1999 and mid-2001. In October 2000, the Agency issued a Note Verbale asking each of its Member States to nominate a single point of contact, known as a Country Co-ordinator (CC), who would interact directly with the NEWMDB's Programme Officer (PO) during data collection cycles. CCs are responsible for the completeness and accuracy of information submitted to the NEWMDB.

The NEWMDB Administrator grants database access to CCs, who can, in turn, designate and authorize other users, Report Co-ordinators (RCs) and Waste Experts (WEs), to assist with NEWMDB submissions.

The NEWMDB was implemented as a series of components that requires authorized users to input and approve information in a step-wise process as shown in Figure 1.

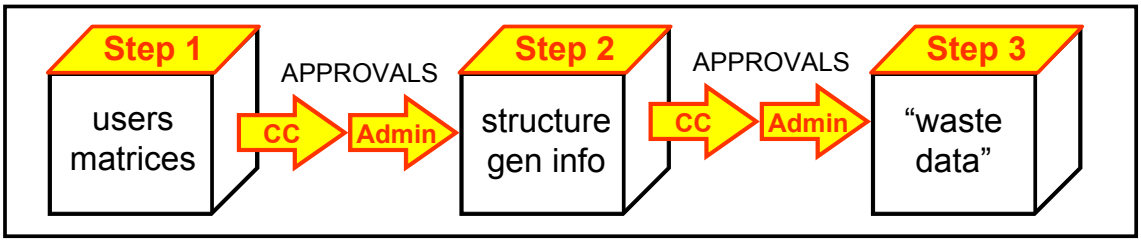

Figure 1: Steps in the NEWMDB Data Input Process

Step 1: CCs input their contact information and they authorize RCs and WEs to assist with data submission (optional). CCs use the NEWMDB's waste class matrix tool to identify all waste classification schemes used in their country and to compare these schemes with the Agency's proposed waste classification scheme.

Figure 2 shows one of the two waste class matrices created by the CC for the USA for the NEWMDB's first data collection cycle. The matrix shows the relationship between the "USDOE" waste classification scheme and the Agency's proposed waste class scheme (LILW-SL, LILW-LL and HLW waste classes). CCs were requested to provide supporting documentation (see the Comments and Attachments "links" in Figure 2) to indicate whether or not a waste classification scheme is required by law or regulation and to describe how the percentages in the matrix were derived. The matrix tool provides support for the Joint Convention requirement that "*For each Contracting Party the report shall also address its... ...criteria used to define and categorize radioactive waste*".

CCs are unable to proceed to Step 2 until waste class matrices are approved by them and by the NEWMDB Administrator (currently this is the NEWMDB's PO).

Waste Class Matrix ▸ USDOE ▸ Status: Approved by Admin

Last modified by Admin on 2002-02-19 15:35:33

Matrix Name	USDOE		
USDOE Class	LILW-SL%	LILW-LL%	HLW%
HLW	0	0	100
TRU	0	100	0
LLW	99.5	0.5	0
11e2	100	0	0

Description: Reference for USDOE classes: Radioactive Waste Management Manual, DOE M 435.1, 7/9/1999

Comments(1) / Attachments(1)

Figure 2: The Waste Class Matrix for the USA's Department of Energy

Step 2: CCs customize how information about radioactive waste management programmes and inventories will be reported to the NEWMDB. This feature was added because a number of respondents to the 1997/98 WMDB questionnaire stated that they found it difficult to "fit" their information into the WMDB's rigid structure. With the NEWMDB, CCs define the number of Reporting Groups and within each Reporting Group they identify the waste management sites and waste management facilities (processing, storage, disposal and dedicated spent/disused sealed radioactive source (SRS) management facilities). For facilities, CCs indicate attributes such as type, capacity, percent filled, etc.

Step 2 includes the "General Information" component where CCs identify who regulates radioactive waste, the laws and regulations that are relevant to radioactive waste management,

significant milestones in radioactive waste management in their countries, and radioactive waste management policies. CCs answer up to 80 policy related questions (some questions are conditional "if" questions, where "Yes" answers require additional questions to be answered).

Step 3: The "Waste Data" component of the NEWMDB is used by CCs (and those they designate to assist them) to identify waste treatment and conditioning methods, to specify the inventory of radioactive waste for each waste class at each waste management site and to specify inventories of spent/disused SRS in dedicated SRS management facilities.

CURRENT STATUS OF THE NEWMDB

The first data collection cycle with the NEWMDB took place July 6, 2001 to March 15, 2002. During the first data collection cycle, 51 Agency Member States appointed CCs (about 40% of Member States) and 22 submissions were received. Even with this low participation rate, progress was made towards achieving the NEWMDB objectives cited. Please see Table I.

Table I: Comparison of NEWMDB Development Objectives with Results Achieved

Development Objective	Results Achieved in the First Data Collection Cycle 07/2001 to 03/2002
support the routine reporting of status and trends in radioactive waste management	The first volume in a new series of reports entitled "Radioactive Waste Management Status and Trends" was issued in 2001 to support of the Agency's information strategy [1]. The first volume states: *The objectives were:* *1. to identify subject areas deemed to be of interest to Member States and the Agency,* *2. to report the status of and trends in radioactive waste management according to these subject areas, and* *3. to base this reporting, to the greatest extent practicable, on quantitative data.* *Objectives 1 and 2 have been met by the current report. However, currently, quantitative data are not available at a sufficient level to achieve objective 3.*" One of the principal objectives for developing the NEWMDB was to achieve objective 3. Volume 2 of the status and trends report benefited from information collected during the NEWMDB's first data collection cycle [6], which demonstrated that the NEWMDB can become an important source of quantitative information for assessing the status and trends of various aspects of radioactive waste management in Agency Member States [12]. However, to achieve objective 3, full and effective co-operation of Member States is required during future NEWMDB data collection cycles. The low participation rate and the small number of submissions resulted in too few data to draw any significant conclusions; however, this situation will change as more data are collected in future data collection cycles.
support the compilation of the inventory of radioactive waste in Agency Member States based on a unified waste classification scheme	One of the fundamental features of the NEWMDB is that it allows Member States to report their waste inventories according to the waste classification scheme(s) used in their own countries. However, the NEWMDB requires Member States to describe how their waste classification scheme(s) compare with the one proposed by the Agency [14]. Member States use the NEWMDB's waste class matrix tool to make this comparison. The Agency uses the waste class matrices to transpose waste inventories reported according a wide variety of national classification schemes into a consolidated inventory reported according to the Agency's proposed waste classes. An assessment of the information collected during the NEWMDB's first data

Development Objective	Results Achieved in the First Data Collection Cycle 07/2001 to 03/2002
	collection cycle indicated that the compilation of a ***comprehensive*** inventory is, for the foreseeable future, extremely difficult, if not impossible, to achieve. The use of the NEWMDB to compile a partial inventory in Agency Member States was restricted due to the limited participation by Member States in the first data collection cycle [8] and the scope of the NEWMDB's data collection [15]. The first consolidated radioactive waste inventory, based on NEWMDB data, is provided in Reference [9]. The report states the following: **Note: The information in the following tables is subject to all the limitations and caveats discussed previously. As such, it should be interpreted solely as an indicator of what the Agency can prepare for dissemination if it obtains the full and effective co-operation of its Member States and when consistent, traceable radioactive waste information is submitted to the NEWMDB by Agency Member States.**
support the development, implementation and use of an indicator of sustainable development for radioactive waste management	As a follow up to the United Nation's (UN) Conference on Environment and Development in 1992 [16], the UN's Department of Economic and Social Affairs (DESA) invited the IAEA to develop one or more indicators of sustainable development (ISD) for the management of radioactive waste (RW). Responsibility for this task was given to the IAEA's Division of Nuclear Fuel Cycle and Waste Technology (NEFW) within the Department of Nuclear Energy. In late 2001, a single ISD-RW was developed and then refined in early 2002. The ISD-RW was tested in September 2002 and it was submitted to DESA in November 2002 for inclusion in its list of core indicators [17]. The ISD-RW uses the definition that sustainability is the point at which the amount of radioactive waste awaiting disposal is not increasing, the waste is in the final form required for disposal and it is being safely stored. Note, since currently there is an international debate about whether or not disposal is the ***endpoint*** for waste management (some have proposed alternatives such as indefinite storage), the use of the term disposal in the context of the ISD-RW implies any internationally acknowledged alternative to disposal. The ISD-RW was developed after UN activities on capacity building, training and country testing in support of indicators of sustainable development. However, the NEWMDB's first data collection cycle was used to collect and compile some of the same nationally-based information that would be needed by countries to compute the ISD-RW [10]. A conclusion from the September 2002 testing was that countries that prepare NEWMDB submissions should be able to calculate the ISD-RW based on those submissions plus supplemental information that is likely to be available [11]. A further conclusion was that capacity building for using the ISD-RW is still required, notably in the context of waste classification [8].
provide the means to assess the development and implementation of national systems for radioactive waste management in Agency Member States	A number of mechanisms have been used to document national radioactive waste management programmes [18] to [22]. While these mechanisms provide extensive detail on national systems for radioactive waste management, they do not provide information in a concise manner that would be easy to digest by policy and decision makers. This issue has been addressed by the NEWMDB. The NEWMDB provides a simple, easy-to-use method for Member States to indicate the status of the development and implementation of their national systems for radioactive waste management. The General Information section of the NEWMDB contains a "policy questionnaire". Instead of free-form text, Member State representatives simply point-and-click to select the appropriate answers to policy questions. The intent of the questions is to assess the status of and the trends for various aspects of national systems for managing radioactive waste. With the low response rate for the first data collection cycle, too few data have been

Development Objective	Results Achieved in the First Data Collection Cycle 07/2001 to 03/2002
	collected to date to draw conclusions. The results obtained were not rigorously assessed because a "lessons learned" process is required to clarify some of the questions and responses. The results are described in Reference [23].
conform, to the greatest extent practicable, with the reporting requirements of the Joint Convention	The use of an international database, like the NEWMDB, to collect the full scope of information required under Joint Convention reporting requirements is currently not feasible. Member States would have to expend a great deal of effort to provide the full scope of information to the NEWMDB and in many cases they may not be able (or may be unwilling) to report this information within the requirements of NEWMDB data collection cycles. The objective set out was "*to conform, to the greatest extent practicable, with the reporting requirements of the Joint Convention*". Tables II and III summarize how the initial version of the NEWMDB meets the objective related to the Joint Convention. The first data collection cycle showed that the NEWMDB can be used to collect some of the information required for Contracting Party reports under the Joint Convention. As such, Member States that are Contracting Parties and that also participate in NEWMDB data collection cycles could include information from NEWMDB reports in their Contracting Party reports to minimize the costs and efforts for reporting. A major reason for seeking conformance with the Joint Convention is that the availability of Contracting Party reports is a decision that will be made by the Contracting Parties themselves. If the decisions are made that (a) the reports will not be publicly available and (b) reporting will only be done under the Joint Convention and not to the NEWMDB, much of the information that would be publicly available via the NEWMDB would disappear from the public domain. This would be contrary to Agency activities to improve the availability of waste management information.

After the conclusion of the first data collection cycle in March 2002, a number of follow up activities were conducted by the IAEA. Please see Table IV.

NEWMDB REPORTS

Figures 3 and 4 illustrate how to obtain NEWMDB reports, which are available cost free. The on line reports provide access to NEWMDB data on a country-by-country, reporting year-by-reporting year basis. This is useful for someone seeking information about a specific country. In addition, compilations of reports are provided in what are known as "profile reports". These compilations are available on CD ROM or in a single archive file that can be downloaded (the archives are large and can take a long time to download if the user does not have broadband internet service).

The profile reports also contain assessments of the information collected during a data collection cycle and detailed guidance for reading NEWMDB reports.

Table II: Joint Convention Objective versus Information to be Collected with the NEWMDB

WMDB Upgrade Objective	Is the objective met by the NEWMDB, version 1?	
take into account, to the greatest extent practicable, reporting requirements stipulated in the Joint Convention **Note 1**: The NEWMDB does not include spent fuel storage facilities or uranium mining and milling facilities. **Note 2**: waste in storage in Member States will be reported to the NEWMDB subject to the limitations cited in Table III. **Note 3**: Please refer to the limitations cited in Table III. **Note 4**: Activity is reported qualitatively by way of classification (such as LILW-SL, LILW-LL, HLW). **Note 5**: Specific radionuclides will be reported only for spent, sealed radioactive sources. **Note 6**: Information about facility decommissioning status in Member States is managed in another Agency database, the Nuclear Fuel Cycle Information System.	• spent fuel management policy	No
	• spent fuel management practices	No
	• radioactive waste management policy	Yes
	• radioactive waste management practices	Yes
	• criteria used to define and categorize radioactive waste	Yes
	• a list of the spent fuel management facilities subject to this Convention, their location, main purpose and essential features	No
	• an inventory of spent fuel that is subject to this Convention and that is being held in storage and of that which has been disposed of	No
	• a list of the radioactive waste management facilities subject to this Convention, their location, main purpose and essential features	see Note 1
	• an inventory of radioactive waste that is subject to this Convention that	
	- is being held in storage at radioactive waste management and nuclear fuel cycle facilities	see Note 2
	- has been disposed	Yes
	- has resulted from past practices	see Note 3
	• this inventory shall contain a description of the material	Yes
	and other appropriate information available, such as: volume or mass,	Yes
	activity	see Note 4
	specific radionuclides	see Note 5
	• a list of nuclear facilities in the process of being decommissioned and the status of decommissioning activities at those facilities	see Note 6

Table III: Waste to be Included/Excluded from the Initial NEWMDB Data Collection Cycles

waste	excluded	included
low specific activity (LSA) waste	in situ	moved (1)
abandoned/contaminated sites	X	
exempt/clearance waste	X	
spent fuel	X	
UMMT/TE-NORM waste	X	
discharges to the environment	X	
special fissionable materials that are considered a resource (e.g. Pu)	X	
remediation waste	in situ	moved (2)
waste awaiting transfer to "disposition option" that is available	X (3)	
HLW at processing facilities		X (4)

(1) LSA waste that is moved to a "licensed waste management facility", i.e., storage/disposal, will be included

(2) waste generated during remediation of a site and moved to a "licensed waste management facility" is included - waste that remains in situ is excluded (the former may be accurately quantified, the latter may not)

(3) to avoid the possibility of double accounting, waste that is awaiting transfer to an available "disposition option" is excluded from the NEWMDB. Examples are hospitals & research centres carrying out what is often referred to as "interim storage" prior to transfer of the waste to a central facility (either storage or disposal). Waste that is being held because there is no disposition option, e.g., greater than class C waste held at reactor sites in the US, would be included in the NEWMDB as inventory because a disposition option is not available.

(4) HLW at processing facilities (vitrified, cemented) should be reported by the facility holding the waste as of the "reporting date" for the NEWMDB. While this waste may be considered as part of (3), they should be reported to avoid missing "significant" waste in any given reporting cycle.

Please refer to the Overview Report *Consolidated Radioactive Waste Inventory* of this fourth Radioactive Waste Management Profiles report for a detailed discussion on the scope of data collection for the NEWMDB and deviations from that scope during the first data collection cycle held July 2001 to March 2002.

Table IV: Activities conducted after the first NEWMDB data collection cycle

Activity	**Results and Conclusions**
consultants' meeting held May 2002 to "develop mechanism, methods and formats for compiling a global radioactive waste inventory"	The consultants' report provided (a) recommendations to the IAEA on how to compile and report an international radioactive waste inventory and (b) a basis of "supporting text" to be included in the IAEA international radioactive waste inventory report to explain the scope and nature of the inventory reported as well as details of how it was compiled. The consultants' recommendations are reflected in Reference [9]. The following text was extracted from the meeting report: "…The compilation of an international radioactive waste inventory is not an easy or straight forward task, given the variety of waste management infrastructures and approaches to waste inventory compilation within IAEA Member States… …The IAEA's current objective is to collect radioactive waste inventory information from all of its Member States, within [a defined] scope and to publish a report that consolidates this information in a consistent manner. The current IAEA data collection effort using the NEWMDB provides a means to collect quantitative waste inventory data… …Full [NEWMDB] participation by all IAEA Member States has not been achieved… …The definition of the term, "comprehensive" would cover a range of radioactive waste not covered within the scope of the current NEWMDB… …Because of these limitations, the term "consolidated inventory" rather than "comprehensive inventory" is recommended…

Activity	Results and Conclusions
	…it is important when the IAEA issues routine "consolidated inventory" reports, that it: • clearly indicates the methodology used to create such a report, • defines the scope of the wastes included in the report (i.e., identify the included and excluded wastes), • identifies any issues that could lead to varying interpretations of the report, and • proposes a way forward for addressing any issues that are identified. Over time, as issues are resolved, discussion of these resolved issues would be removed from the inventory reports…. …An IAEA consolidated, waste inventory report would be a summary of information provided [only] by those Member States that participated in the data collection process. It is the end result of adding up Member States' waste inventory information, which is reported to the IAEA according to a wide variety of Member State based waste classification schemes, into a unified context. Any individual inventory report would provide an overview of radioactive waste inventories for participating Member States at a point in time. Over a period of time, a series of consolidated reports could be used to assess aggregate trends in radioactive waste management for reporting Member States. In addition the consolidated inventory would provide concise, easy to understand information suitable for the public and political decision makers… …IAEA staff have concluded that radioactive waste encompasses such a broad area, that it is very difficult to develop a single data source approach… …The IAEA has developed the NEWMDB to compile some of this diverse information from Member States and to translate waste inventory information according to a common waste classification scheme… The NEWMDB does not cover reporting of spent nuclear fuel… …The IAEA maintains databases for power and research reactor spent nuclear fuel and publishes summary reports… …The IAEA should consider adding a "waste flag" for spent nuclear fuel declared as waste… …The fuel databases could then be used by the IAEA to compile a consolidated inventory of spent nuclear fuel declared as waste to report summary statistics… …The only [supplement to NEWMDB data] envisioned in the immediate future for the consolidated inventory report is from spent nuclear fuel databases… …The NEWMDB data and spent nuclear fuel information from a supplemental source could provide much of the radioactive waste inventory in each Member State. Additional supplemental information sources, e.g., waste inventories at UMMT sites, would be needed to compile a complete radioactive waste inventory at the national level, which could then be rolled up to compile a complete inventory at the international level…"
consultants' meeting held Sept 2002 on "Testing and Evaluation of an Indicator of Sustainable Development for Radioactive Waste Management (ISD-RW)"	The participants made the following observations, recommendations and conclusions: "The ISD-RW is acceptable as is; however, the guidance that had been prepared by the IAEA for calculating the indicator is inadequate. New guidance was developed. The NEWMDB does not have all the information needed to compute the ISD-RW. However, CCs who prepare NEWMDB submissions should be able to calculate the ISD-RW based on those submissions plus supplemental information. An ISD-RW questionnaire should be added to the NEWMDB to provide an effective way of compiling the information needed to compute the ISD-RW. Since the ISD-RW is computed for each waste class used by a country, understanding and use of both the NEWMDB and ISD-RW should be harmonized by way of achieving international consensus on radioactive waste classification. Additional testing of the ISD-RW would be beneficial, especially at Oct / Nov 2002 workshops on the NEWMDB." Participants were able to calculate the ISD-RW for waste classes used in their countries. They felt that the results were meaningful and fairly represented the status of sustainability of radioactive waste management in their countries.

Activity	Results and Conclusions
combined training and lessons learned workshops Oct and Nov 2002	Extra budgetary funding for combined training / lessons learned workshops was provided by the Government of Japan near the middle of 2002. Three workshops were scheduled for October / November 2002. However, one of the workshops had to be delayed until January 2003. The first workshop was held 21-23 October at Agency headquarters in Vienna, Austria. The second was hosted by the Government of the United States of America 4-6 November at the Yucca Mountain Project Office, Las Vegas, Nevada, USA. The third workshop is scheduled for 27-29 January 2003 at Agency headquarters. Participants from 16 Agency Member States attended the first workshop. Participants from 9 Member States attended the second workshop. A total of 16 participants are expected for the third workshop. The full agenda and viewgraphs presented can be viewed by accessing the following Internet web page (the page is part of the NEWMDB's on line help): http://www-newmdb.iaea.org/showhelp.asp?Topic=15-1-1 The workshops highlighted the following issues: • Not all participants had the same understanding of requirements for making submissions to the NEWMDB. • Not all terms and definitions were interpreted the same way by all participants (there were differences in understanding of terms such as "interim storage", "closed" and "operating life" (in the context of storage facilities), "dedicated disused/spent sealed radioactive source management facilities", etc.). • Some NEWMDB design features made it difficult to complete data submissions. For example, for radioactive waste inventories, Member States were asked to identify "other characteristics of waste" on a site-by-site basis. However, some Member States "rolled up" their submissions in theoretical sites ("All Site" and "National") and they were reluctant to identify "other characteristics" since the information could be misleading. The main conclusions from the first two workshops are: (a) the information submitted in the first data collection cycle may be inconsistent since not all Member States had the same understanding of requirements, terms and definitions even though an extensive on line glossary was provided (http://www-newmdb.iaea.org/showhelp.asp?Topic=8-1-1). (b) enhancements and improvements to the NEWMDB are needed to ensure that Member States can provide information to the Agency with minimum effort but with maximum confidence in the information submitted.

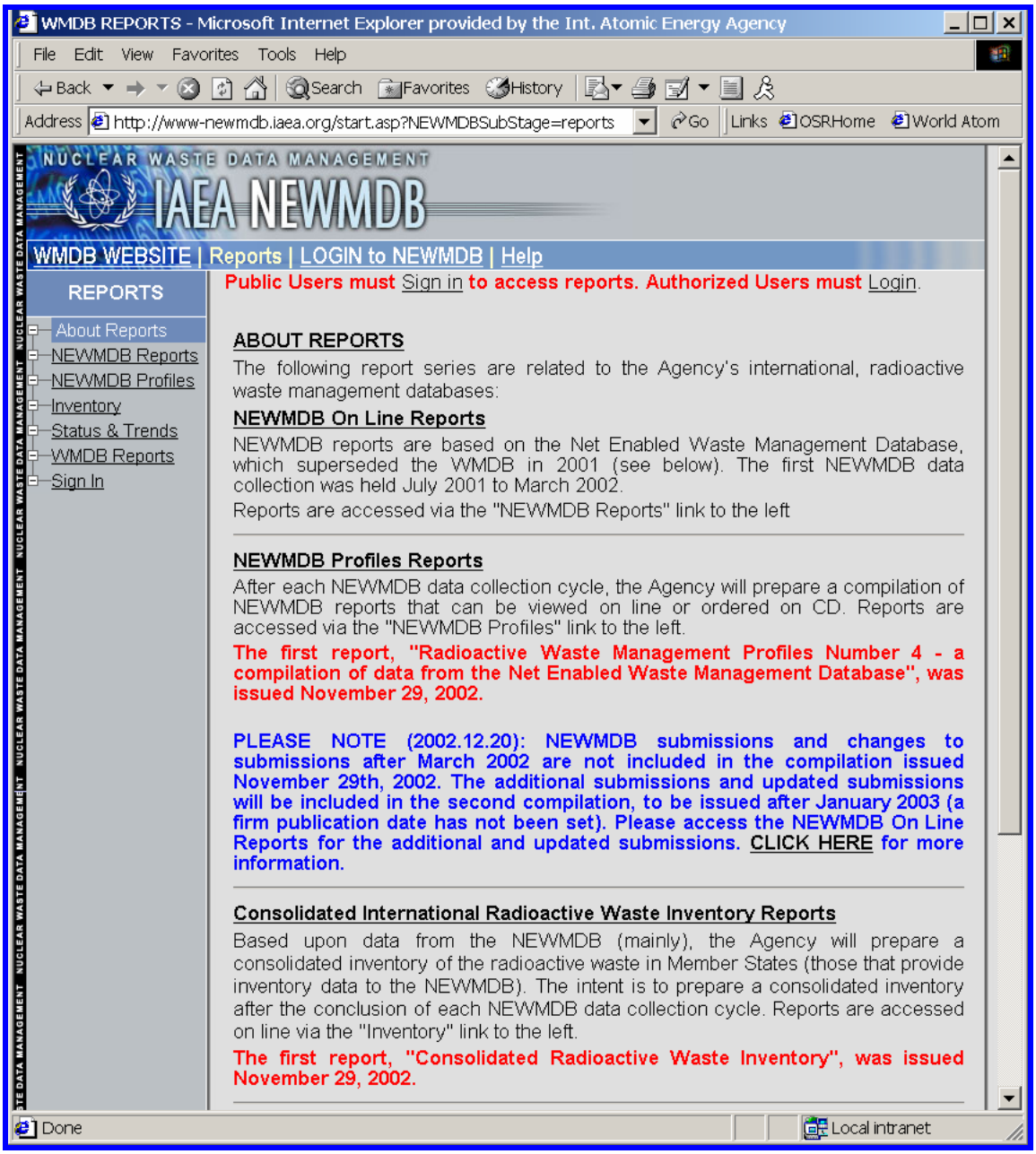

Figure 3: Screen capture showing access to publicly accessible NEWMDB reports

the screen above is accessed via http://www-newmdb.iaea.org/reports.asp

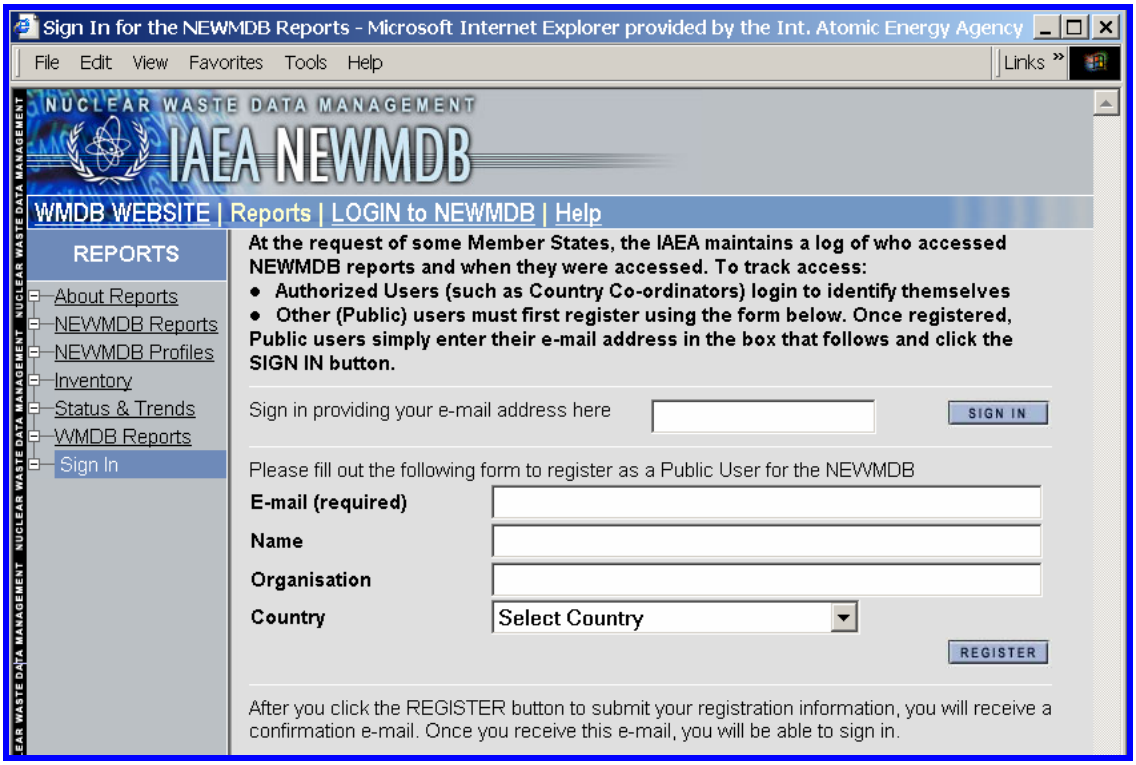

Figure 4: Screen capture showing the Public User sign-in/registration screen

THE WAY FORWARD

On February 14, 2002, the IAEA issued a Note Verbale asking Member States that had not yet appointed CCs for the NEWMDB to do so. The Note Verbale also asked Member States that had not yet made a submission to the NEWMDB to do so by January 31, 2003. When this paper was written, there were 60 CCs and an extension to the first data collection cycle was underway.

A third combined training / lessons learned workshop will be held at the end of January 2003. In addition, a workshop under regular Agency budget will be held May 2003 to specify improvements and enhancements to the NEWMDB. A prototype NEWMDB version 2 will be developed and subjected to testing. A new data collection cycle will be held once version 2 is launched. Hopefully, this will take place in late 2003 and it will use the reporting year 2002 (Member States will be asked to report on the status of their waste management programmes as of the end of 2002). Since not all Member States are able to report radioactive waste inventories as of the same reporting date, the NEWMDB allows countries to specify the date(s) to which waste inventories are reported.

SUMMARY

The NEWMDB is the Agency's new, Internet based database to compile information on national radioactive waste management programmes and organizations, plans and activities, relevant laws and regulations, policies and radioactive waste inventories in Agency Member States. The first data collection cycle was held July 2001 to March 2002. Due to low participation, the first cycle was extended to January 2003.

The first data collection showed that the NEWMDB can become a reliable source of information about radioactive waste management and inventories in Agency Member States. However, this will require the full participation of Agency Member States as well as a consistent understanding of waste management terms and definitions and a consistent understanding of NEWMDB requirements by all participants. Of particular note, radioactive waste management organizations need a common radioactive waste classification scheme to facilitate communication at the international level.

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