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# Article 36 of the Euratom Treaty

**Member States' Art.35/36 Representatives' Meeting**

**Ispra 18-19 September 2018**

**Development of the RADD database  
Recommendation 2004/2/Euratom**

**Stefan VAN DER STRICHT**

**DG ENER D3 – Radiation Protection & Nuclear Safety**

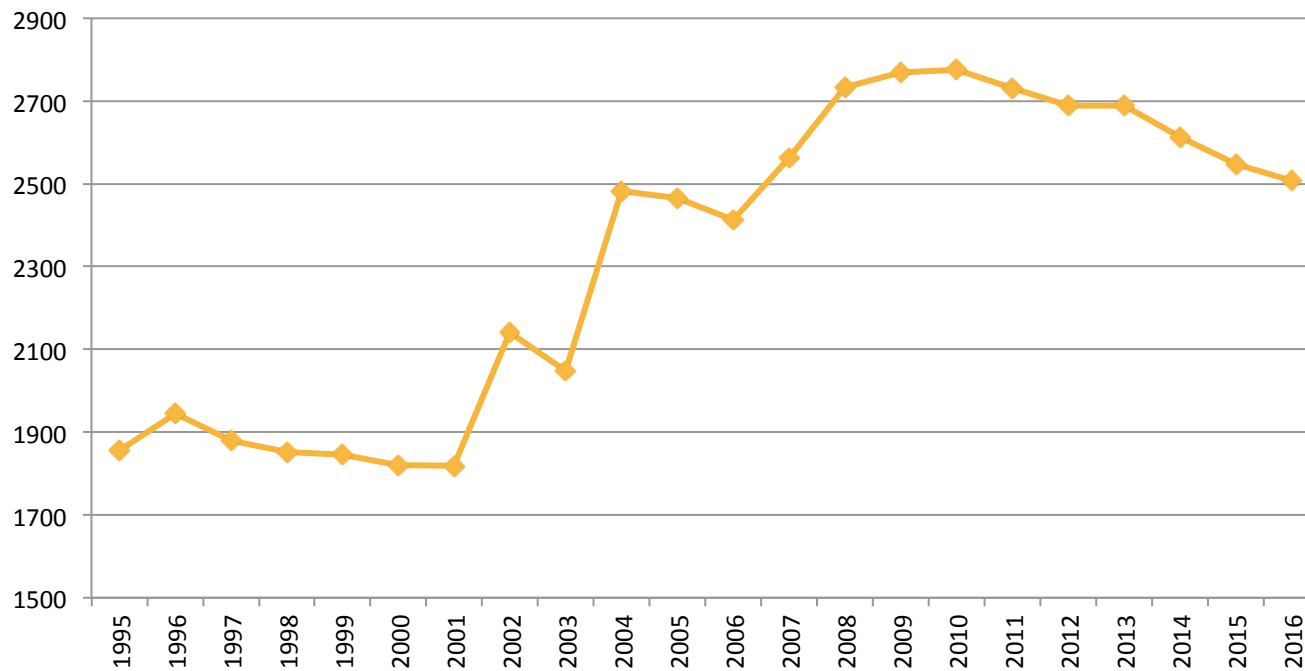


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## RADD - status

Holds data starting 1995.

As of the end of 2016: **51 117** airborne+liquid radioactive discharge values.



## RADD on-line use by data providers

The current on-line data submission functionality of RADD saw light in 2014.

The initial year revealed teething problems, nearly all were solved in the meantime.

Significant improvement of the stability of the submission functionality was achieved. Unfortunately, one persisting issue remains: a non-remediable bug affecting cache management and that may crash RADD. If this occurs, a simple resetting procedure will quickly restore functionality.

As of 2016, seven (out of sixteen) Member States use on-line data submission. The on-line declaration ought, depending on MS' internal procedures, to be carried out prior (or in parallel to) a formal submission to the Commission. A prior on-line submission provides the possibility to eliminate clerical errors, if any (due to a data validation procedure the database administrator carries out).

The electronic workflow (data validation and ensuing upload into the production database) between the MS' data providers and the RADD database administrator has proven its efficiency.

All submissions delivered as paperwork are manually processed by the RADD database administrator. This approach is however not entirely within the spirit of RADD...



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## RADD – scope of development

To **replace** the **on-line submission functionality** of RADD with a module based on modern software\*.  
To become available for the 2018 declarations (in 2019) and to achieve **full operational status in 2020**.

### Features

- **Transcription templates that facilitate uploads (of CSV files)**. The concept is similar to the REM database upload tool. The manual entry of data into RADD is thus avoided.
- **Automated consistency checks** on the data sets with **visual alerts** in case of doubt.
- **Interruption** of a working session without losing data & resume work at any time.

### Goals

- **To encourage** more MS to perform electronic data declarations.
- **To reduce** the possibility of the EC database administrator manually introducing mistakes. It is here reminded that the data are (and remain) the intellectual property of the MS. Despite RADD displaying a disclaimer to that effect, it is our intention to achieve a maximum level of accuracy in the data that are eventually put in the public domain.

\* The on-line submission for site and data provider management remaining as they are.



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## RADD – development results <sup>(1a)</sup>

Perform the standard log-in using the habitual URL.

The menu will feature a new sub-item « *Electronic declaration* » that activates the new module.

The screenshot displays the RADD web application interface. At the top, there is a blue navigation bar with the RADD logo on the left and several menu items: "Add a new report", "Modify existing report", "Create a template", "Welcome testFR testFR", "Quit", a language dropdown set to "en", and a version indicator "V1.1.4.1". A "Disclaimer" link is visible in the bottom right corner of the navigation bar. Below the navigation bar is a light blue header for the "Add" form. The form contains the following fields:


- Country:** A dropdown menu with "FRANCE" selected.
- Templates:** A dropdown menu with "select a template" selected. A red error message "Field is required" is displayed to the right.
- Reporting year:** A dropdown menu with "Select a year" selected. A red error message "Field is required" is displayed to the right.
- File:** A text input area with the placeholder text "Click to browse (or drag & drop to upload your CSV file)". A red error message "Field is required" is displayed to the right.
- Templates:** A label with an eye icon next to it.



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## RADD – development results <sup>(1b)</sup>

If a previous working session had been interrupted, upon restart the new module will per default display a dashboard listing the unfinished work:

 **RADD** [Add a new report](#) [Modify existing report](#) [Create a template](#) Welcome testFR testFR [Quit](#) en V1.1.4.1 [Disclaimer](#)

**Dashboard**

testFR' s dashboard

Owner	Reporting year	Country	Status	Reporting date	
 testFR testFR	2017	FRANCE	DRAFT	05/09/2018 00:00:00	 

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# RADD – development results (2a)

Template definition, in most cases a one-off procedure:

RADD Add a new report Modify existing report **Create a template** Welcome testFR testFR Quit en V1.1.4.1

### Create a template

Test Name

+ Add

#### Edit

Name:  ✖ Field is required

Country:  FR ✖ Field is required

Template column:

	Mandatory column			CSV column		
1	Year	NUMBER	DISCHARGE			
2	Site	TEXT	DISCHARGE			
3	Release	TEXT	DISCHARGE			
4	Nuclide	TEXT	DISCHARGE			
5	<DL	TEXT	DISCHARGE			
6	Unit	TEXT	DISCHARGE			
7	Discharge	NUMBER	DISCHARGE			
8	NucComment	TEXT	DISCHARGE			
9	ChemForm	TEXT	DISCHARGE			
10	AchDetLim	TEXT	DISCHARGE			
11	Site	TEXT	SITE			
12	GeneralComment	TEXT	SITE			
13	SiteComment	TEXT	SITE			
14	Vol-Air	NUMBER	VOLUME			
15	SampCommentAir	TEXT	VOLUME			
16	Vol-Liq	NUMBER	VOLUME			
17	SampCommentLiq	TEXT	VOLUME			

Sort & save Cancel



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## RADD – development results (2b)

Detail of the template definition area:

Mandatory column				CSV column			
1	Year	NUMBER	DISCHARGE				
2	Site	TEXT	DISCHARGE				
3	Release	TEXT	DISCHARGE				
4	Nuclide	TEXT	DISCHARGE				
5	<DL	TEXT	DISCHARGE				
6	Unit	TEXT	DISCHARGE				
7	Discharge	NUMBER	DISCHARGE				
8	NucComment	TEXT	DISCHARGE				
9	ChemForm	TEXT	DISCHARGE				
10	AchDetLim	TEXT	DISCHARGE				
11	Site	TEXT	SITE				
12	GeneralComment	TEXT	SITE				
13	SiteComment	TEXT	SITE				
14	Vol-Air	NUMBER	VOLUME				
15	SampCommentAir	TEXT	VOLUME				
16	Vol-Liq	NUMBER	VOLUME				
17	SampCommentLiq	TEXT	VOLUME				





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## RADD – development results (3a)

Data modification (correction) for the years y to y-3:

Add a new report ▾ Modify existing report Create a template Welcome testFR testFR en ▾ V1.1.4.1 *Disclaimer*

Modify existing report -

Country: FRANCE ▾

Reporting year: 2016 ▾

2017  
2016  
2015

Site	Reporting year
Belleville	2016
Bugey B	2016
Blayais	2016
Cattenom	2016
Chinon B	2016
La Hague	2016
Chooz B	2016
Cruas	2016

Note: bottom of screen cropped off



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# RADD – development results (3b)

Blayais - 2016

Airborne Liquid Volumes General comment

Nuclide	Recommended	Discharge value (GBq/year)	Comment	Below detection limit	Chemical Comment	Recommended DL (Bq/m3)	Achieved DL (Bq/m3)	Delete Discharge
Ag-108m	✗	1.07E+01	<input type="text"/>	<input type="checkbox"/>				
Ag-110m	✓	1.04E+03		<input type="checkbox"/>				
Am-241	✓	NA		<input type="checkbox"/>		5.00E-03		
Ar-41	✓	1.00E+02		<input type="checkbox"/>				
Ba-140	✓	NA		<input type="checkbox"/>				
C-14	✓	5.79E+02		<input type="checkbox"/>		1.00E+01		
Ce-141	✓	NA		<input type="checkbox"/>				
Ce-144	✓	NA		<input type="checkbox"/>				
Cm-242	✓	NA		<input type="checkbox"/>				
Cm-243	✓	NA		<input type="checkbox"/>				
Xe-133m	✗	NA		<input type="checkbox"/>				
Xe-135	✗	1.55E+02		<input type="checkbox"/>				
Zn-65	✓	NA		<input type="checkbox"/>				
Zr-95	✓	NA		<input type="checkbox"/>				

+ Add Other Nuclide

Submit to EC Cancel ✗ Delete

Note: central part of screen cropped off



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## RADD – development results (4)

Error highlighting:

FRANCE - 2017

Show errors only

Nuclides Volumes General comment

Year	Site	Nuclide	Nuclide comment	Release type	Discharge (GBq)	Discharge unit	Chemical comment	Achieved DL Bq/m <sup>3</sup>	Recommended DL Bq/m <sup>3</sup>
2016	Belleville	Cs-134		Airborne	2.22E-04	giga			
2017	Belleville	H-3		Liquid	5.46E+04	giga			
2017	Chinon B	I-131		Airborne	0.004*	giga			2.00E-02

Navigation: < 1 >

Putting the cursor atop a reddened field will return a brief error message.

## **RADD – a discussion point**

The database administrator is in charge of translations (and now systematically edits comments to achieve uniformity in their presentation). It would be appreciated should DP pay attention to these reformulations and associated formats.

## **RADD – final statements**

The Commission, historically, has taken the point of view that radioactive discharge data are environmental data (a non-retrievable but quantified radiological source term released into the environment).

The Commission, since the 1960s made these data publicly available (initially in printed form).

This approach predates the 2001 Aarhus Convention that established that public authorities are obliged to actively disseminate environmental information in their possession.

This in turn led to the adoption of Commission Recommendation 2004/2/Euratom on the reporting of radioactive discharge data in pursuance of Art.36 of the Euratom Treaty (previously, this reporting was addressed in the consecutive Recommendations on the application of Art.37).

The development of RADD was initiated in the same period; its aim (apart from the publication of data) was – and is – to be instrumental to the implementation of 2004/2/Euratom.



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**RADD on the Commission's public EUROPA web site**

<http://europa.eu/radd/>

**Thank you for your attention !**

**Stefan VAN DER STRICHT**

DG ENERGY – Unit D3 Radiation Protection & Nuclear Safety  
Building EUFO 4/353 - 10, rue R. Stumper - L-2557 Luxembourg  
(+352) 4301 37104  
mailto: stefan.van-der-stricht@ec.europa.eu