

IMPEL Projects on Inspection Planning

Doing The Right Things
easyTools



IED Inspections

IED/IRAM Inspection Programme



European Union Network for
the Implementation and Enforcement
of Environmental Law

Horst Büther, Germany

Pristina, 12 November 2015

History

easyTools



- 1997: IMPEL – Minimum Criteria for Inspections
- 1999: IMPEL - Reference Book for Environmental Inspections
- 2001: EU – Recommendation on Minimum Criteria for Environmental Inspections
- 2007: IMPEL – Step by Step Guidance Book for Planning of Environmental Inspections
- 2011: IMPEL – easyTools Risk Assessment Guidance Book
- 2011: EU - Industrial Emissions Directive
- 2012: IMPEL – Guidance for IED Inspections
- 2013: IED/IRAM Inspection Programme

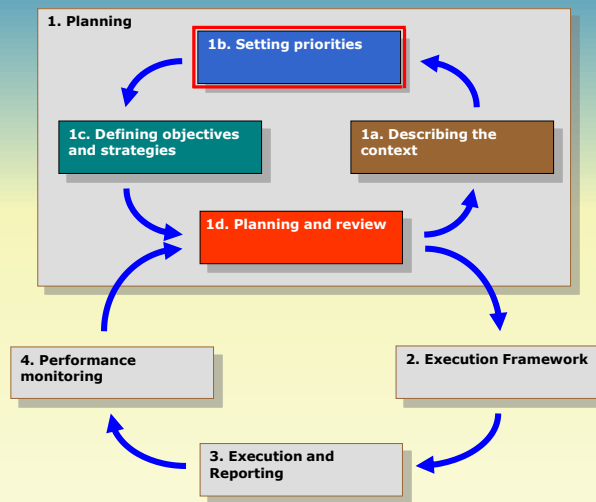


European Union Network for
the Implementation and Enforcement
of Environmental Law

Horst Büther

2

ENVIRONMENTAL INSPECTION CYCLE



Horst Büther

3

Article 23: Environmental inspections

IED Inspections

4. Based on the inspection plans, the competent authority shall regularly draw up programmes for routine environmental inspections, **including the frequency of site visits for different types of installations**
 - The period between two site visits shall be based on a systematic appraisal of the environmental risks of the installations concerned and shall not exceed **1 year** for installations posing the highest risks and **3 years** for installations posing the lowest risks.



4

easyTools Project 2010/11

easyTools
★★★★★

Risk Assessment in Inspection Planning



Development of a web based risk assessment tool for inspections like IPPC (IED), Seveso, waste, waste water, genetic engineering, agriculture and so on



Horst Büther

5

Objectives

easyTools
★★★★★

- Evaluation of existing inspection tools and risk criteria
- Development of a risk assessment tool for environmental inspections that could easily be used by every IMPEL member
- Integration into the inspection cycle of the Step by step guidance book (DTRT)
- Availability from the IMPEL website as an advanced interactive IT tool



Horst Büther

6

Risk Criteria

easyTools
★★★★★

Potential impacts

- Kind and type of installation
- Risk of accidents
- Handling and storage of waste

Actual impacts

- Levels and types of emissions: into air and water
- Sensitivity of the local environment
- Incidents and accidents

Operator performance

- Compliance with permit conditions
- Attitude of the operator
- Environmental management system (EMAS)

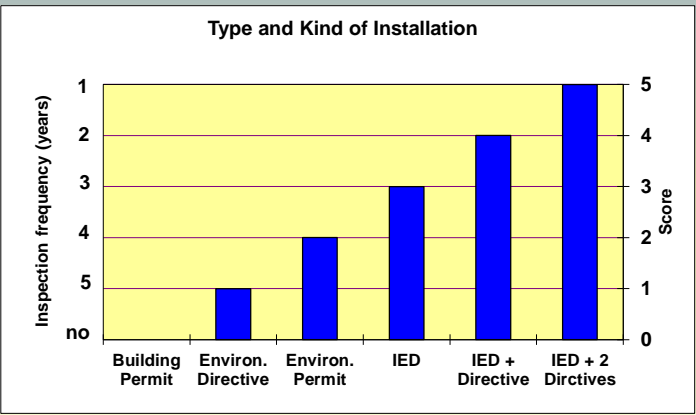


Horst Büther

10

Potential Impacts

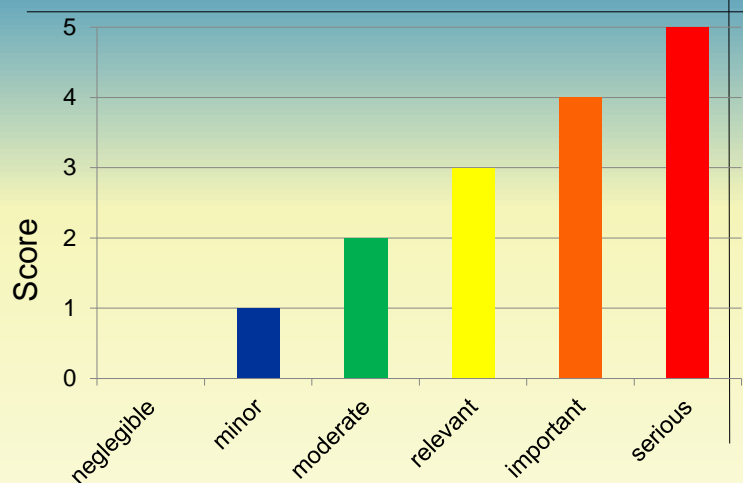
easyTools
★★★★★



Horst Büther

11

Impact on the Environment

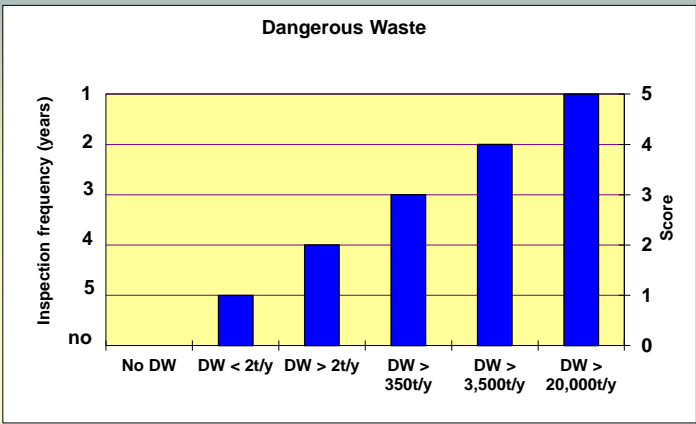


Horst Büther

12

Potential Impacts

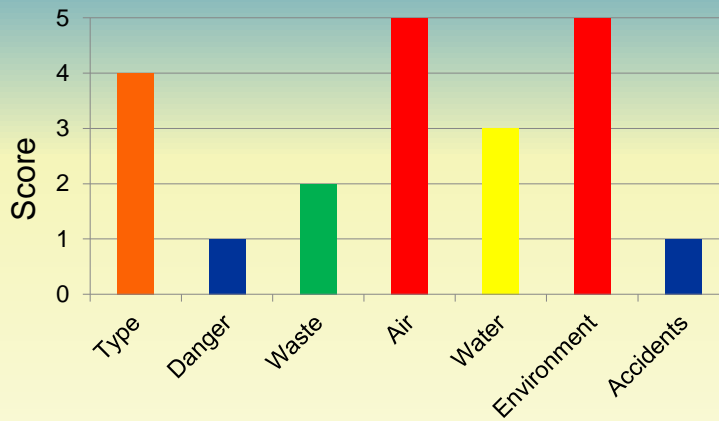
easyTools
★★★★★



Horst Büther

13

Integrated Risk Assessment Method

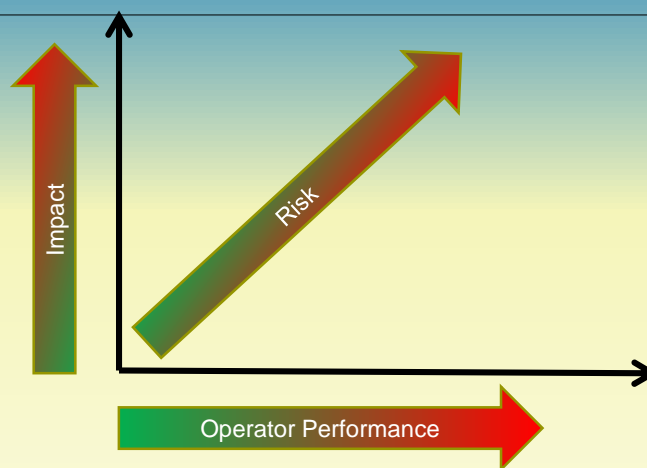


Horst Büther

14



Risk of the Installation



Horst Büther

15



Integrated Risk Assessment Method

easyTools
★★★★★

Influence of Operator Performance

- Operator performance criteria:
 - ▶ Compliance
 - ▶ Attitude of the operator
 - ▶ Environmental management system
- Scoring of operator performance criteria:
 - ▶ good: -1
 - ▶ moderate: 0
 - ▶ bad: +1
- The average (integer) of the operator performance scoring is added to each impact criteria score ▼

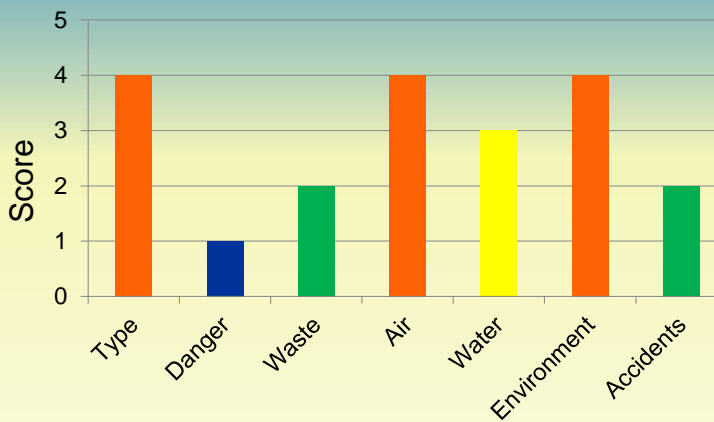
risk score



Horst Büther

16

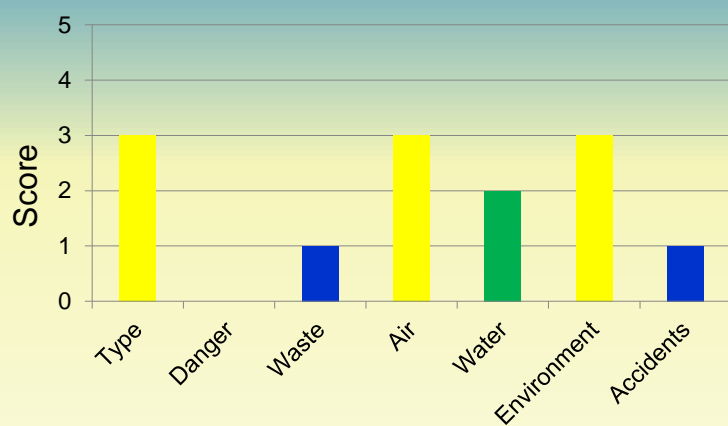
Scored Risk Criteria



Horst Büther

17

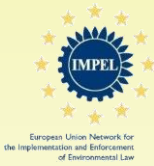
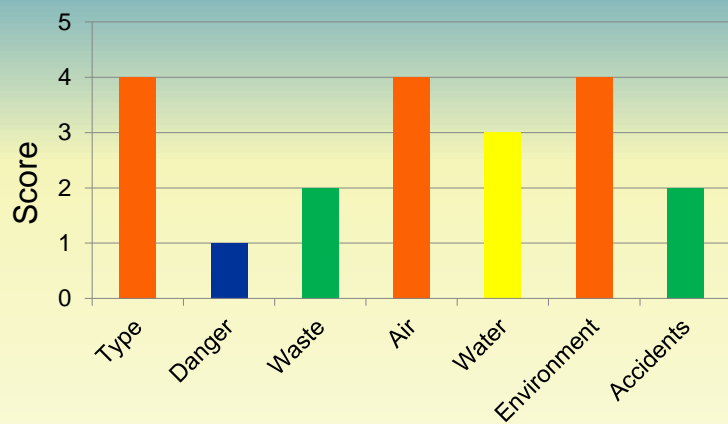
Good Operator Performance



Horst Büther

18

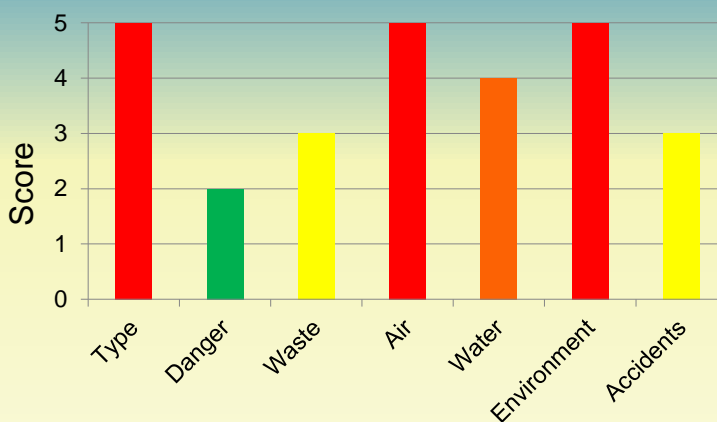
Scored Risk Criteria



Horst Büther

19

Bad Operator Performance



Horst Büther

20

Integrated Risk Assessment Method

easyTools
★★★★★

IRAM principles

- I. The inspection frequency is determined by the highest impact score
- II. The inspection frequency is reduced by one step, if the set number of highest scores is not met (the Rule)
- III. The inspection frequency can be changed by one step up or down based on operator performance
- IV. The more criteria are scored high, the more inspection effort is needed

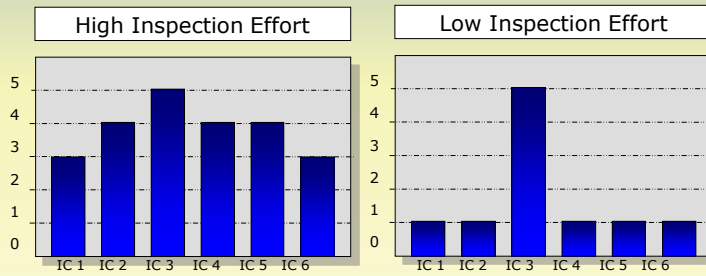


Horst Büther

21

IRAM Principles II and IV: Inspection Frequency and Effort

easyTools
★★★★★



Horst Büther

22

Weight

easyTools
★★★★★

- Not all criteria have the same importance
- Therefore: Weighting
- Weighting is often Political
- Weighting factors (*) and
- Weighting terms (+)



Horst Büther

23

Web Tool and Database

easyTools
★★★★★

- The IRAM rules were implemented into a web based programme for risk assessment in inspection planning
- The programme distinguishes between:
Coordinator ---► decides on inspection task, criteria, and steering terms and factors
Inspector -----► does the risk assessment
- Assessment data storage in the internet
- The assessment data can also be downloaded as XML- or CSV-files and imported into national data bases (Access and Excel)
- Address of the programme:
<https://www.fms.nrw.de/lip/authenticate.do>



Horst Büther

24



Lucom Interaction Platform

easyTools
★★★★★

The screenshot shows a web interface for the Lucom Interaction Platform. At the top left is the IMPEL logo. At the top right is the 'easyTools' logo with five stars. Below the logo is a language selector set to 'English'. On the left side, there is a sidebar with a green and orange checkered icon and three links: 'Register', 'Reset password', and 'Integrated Risk Assess'. The main area is titled 'Logon' and contains the text 'Please enter your logon data of user-id and password.' followed by input fields for 'user-id' and 'password', and a 'start' button. At the bottom of the main area, there is a link: '[Download the description of the tools for the Integrated Risk Assessment Method]'.

IMPEL

easyTools
★★★★★

English ▼

Logon
Please enter your logon data of user-id and password.

user-id:

password:

start

[Download the description of the tools for the Integrated Risk Assessment Method]

Register
Reset password
Integrated Risk Assess



Horst Büther

25



Lucom Interaction Platform

easyTools



Lucom Interaction Platform

https://www.fms.nrw.de/lip/content.do

New Language Versions

Logged in as: Koordinator BR Köln

Welcome, Koordinator BR Köln!

Date of the last login: April 1, 2013 at 6:14 PM

You are on the IMPEL form server that provides you with an application for risk assessment in inspection planning.

Home

Master data

Folders A-Z

Forms A-Z

Search

Support

English

Czech

Deutsch

Français

Hrvatski

Portuguese

Slovenian



Horst Büther

26



Lucom Interaction Platform

easyTools



Assessment done by

Inspection object ID

Inspection task

Date of inspection plan

Integrated Risk Assessment

Address data

Street

Postal code Location



Horst Büther

27

(0 records) 125%

Impact criteria	Maximum score	Score	score (weight)
Type and kind of installation	5	4	0
Impacts on human health or the environment	5	2	0
Releases to air	5	3	0
Releases to water / off-site transport in waste water	5	5	0
Releases to land	5	0	0
Off-site transfer of waste	5	4	0
Input of waste	5	4	0
Quality of the local environment	5	3	0
Sensitivity of the local environment	5	3	0
Risk of accidents	5	5	0
Noise	5	1	0

Minimum number of highest score
Lowest risk category
Highest risk category


Input of Operator Performance Scores

Operator performance criteria	Weight of criteria	Score
Compliance	2	0
Attitude of the operator	1	-1
Environmental management system	1	-1


easyTools

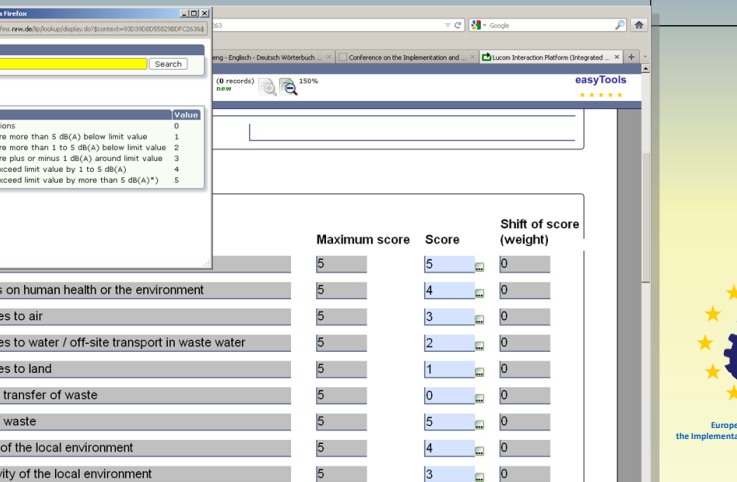
European Union Network for
the Implementation and Enforcement
of Environmental Law

28




Lucom Interaction Platform





	Maximum score	Score	Shift of score (weight)
Impacts on human health or the environment	5	5	0
Releases to air	5	4	0
Releases to water / off-site transport in waste water	5	3	0
Releases to land	5	2	0
Off-site transfer of waste	5	1	0
Input of waste	5	0	0
Quality of the local environment	5	5	0
Sensitivity of the local environment	5	4	0
Risk of accidents	5	3	0
Risk of accidents	5	2	0
Noise	5	1	0

[look up value]



Assessment Results

easyTools
★★★★★

Highest risk score

3

Number of highest risk scores

2

Risk category

3

Maximum inspection effort (100%)

55

Sum of inspection profile

26

Inspection effort (percentage)

47

%

Inspection category

B

Inspection frequency

36

Latest inspection date

24.12.2016

Horst Büther

30

IRAM Inspection Program

easyTools
★★★★★

	nameInspector	inspektionObject	identificationNumber	inspection task	risk category	inspection category	inspection frequency	latest inspection date	status
					≥		≥	≥	
Apply filter					≤		≤	≤	
<input type="checkbox"/>	1 Horst Büther	Haifa 1	h1	Draft Israel IPPC	6	D	6	20.07.2014	in use
<input type="checkbox"/>	2 Horst Büther	Tel Aviv 1	ta1	Draft Israel IPPC	5	D	12	19.01.2015	in use
<input type="checkbox"/>	3 Horst Büther	Dead Sea 1	ds1	Draft Israel IPPC	5	C	12	21.01.2015	in use
<input type="checkbox"/>	4 Horst Büther	Errorrest3	et3	IPPC and other industrial installations	5	C	12	19.02.2015	in use
<input type="checkbox"/>	5 Horst Büther	Errorrest2	et2	IPPC and other industrial installations	5	C	12	20.02.2015	in use
<input type="checkbox"/>	6 Horst Büther	IO1	Exceltest	IPPC and other industrial installations	4	C	24	17.01.2014	in use
<input type="checkbox"/>	7 Horst Büther	IO1-1	Exceltest1	IPPC and other industrial installations	4	C	24	17.01.2014	in use
<input type="checkbox"/>	8 Horst Büther	Errorrest3	et3	IPPC and other industrial installations	4	C	24	19.02.2016	in use
<input type="checkbox"/>	9 Horst Büther	Errorrest1	et1	IPPC and other industrial installations	4	C	24	20.02.2016	in use
<input type="checkbox"/>	10 Horst Büther	IO3	12343	IPPC and other industrial installations	4	C	24	20.02.2016	in use

Horst Büther

31

Guidance book

easyTools
★★★★★

- Introduction in Risk Assessment
- Integrated Risk Assessment Method (IRAM)
- Manual of the online IRAM tool
- Examples of impact and probability criteria



Horst Büther

32

Cologne Workshop Conclusions

easyTools
★★★★★

- The methodology is accepted
- The comparison with other systems confirms the value of IRAM
- The IRAM tool is an added value and organisations can start implementation
- Procedural arrangements in the member countries need to be made



Horst Büther



33

Utilisation of IRAM

easyTools
★★★★★

IRAM is (considered to be) used by Inspection Authorities of

- Austria, Belgium, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Georgia, Germany, Greece, Iceland, Italy, Luxembourg, Macedonia, The Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Turkey and RENA member countries.



Horst Büther

34

Thank you for your attention



horst.buether@brk.nrw.de



Horst Büther

35