

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

Sarajevo, 23 March 2016

History

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- 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

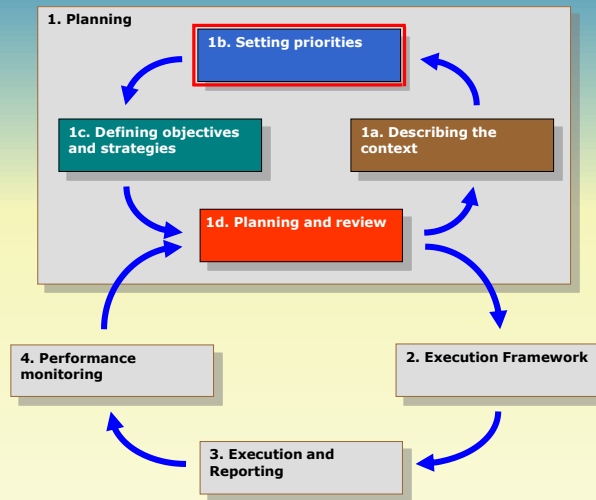


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2

ENVIRONMENTAL INSPECTION CYCLE



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

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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



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5

Objectives

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- 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



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Risk Criteria

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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)

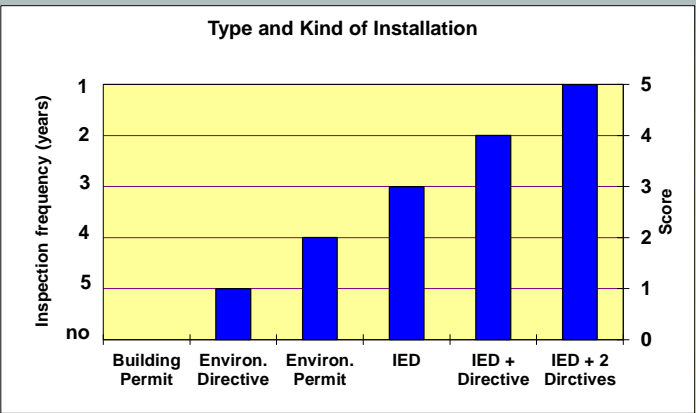


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10

Potential Impacts

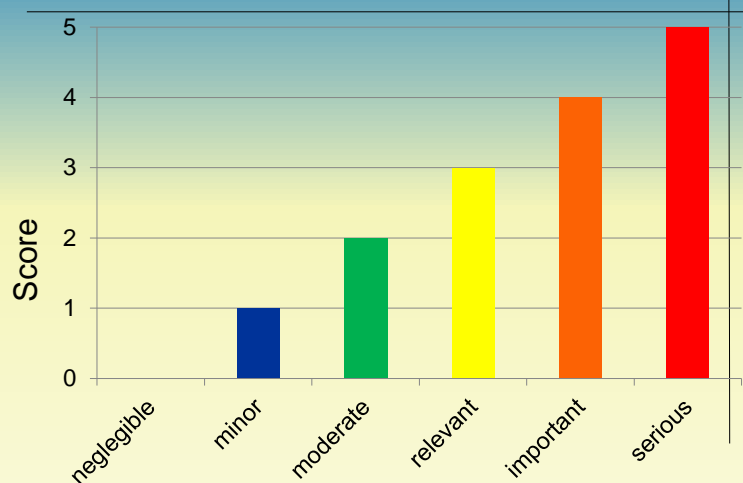
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Impact on the Environment

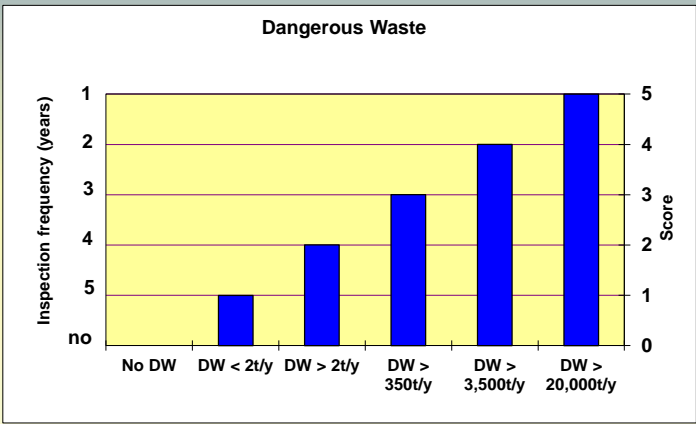


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12

Potential Impacts

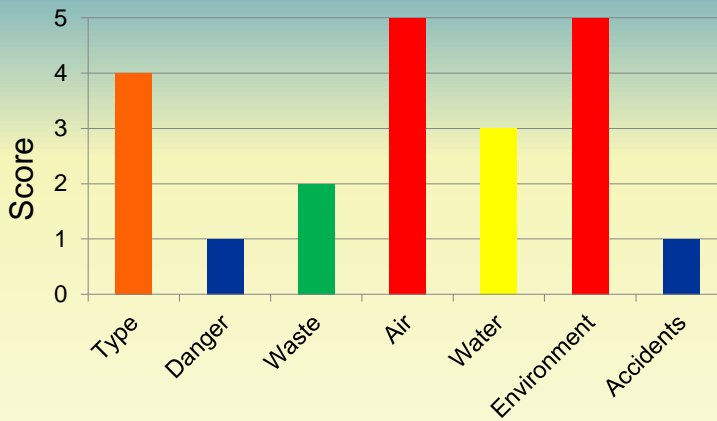
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13

Integrated Risk Assessment Method

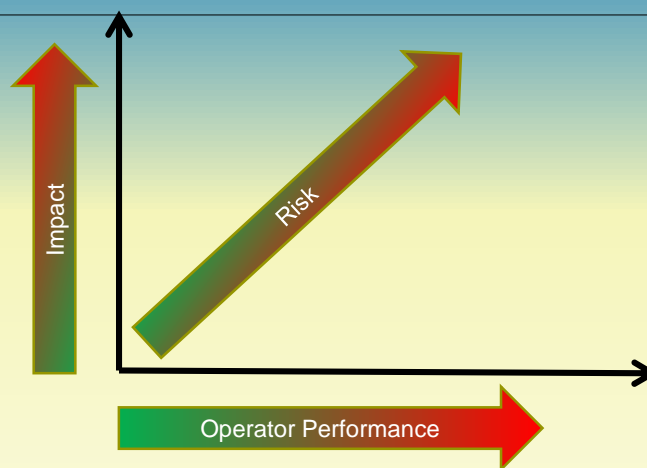


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Risk of the Installation



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Integrated Risk Assessment Method

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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 ▼

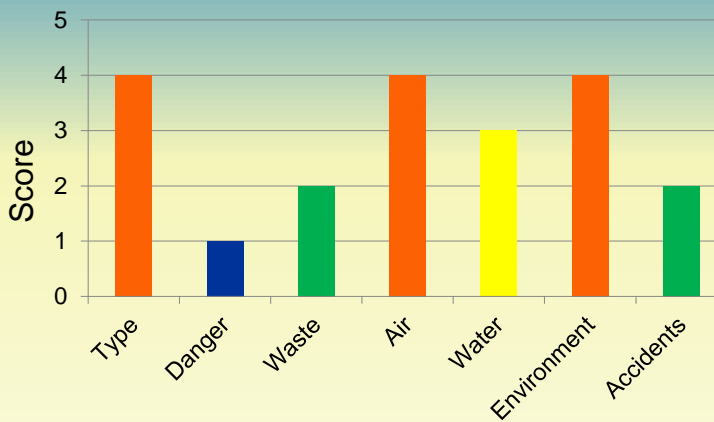
risk score



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16

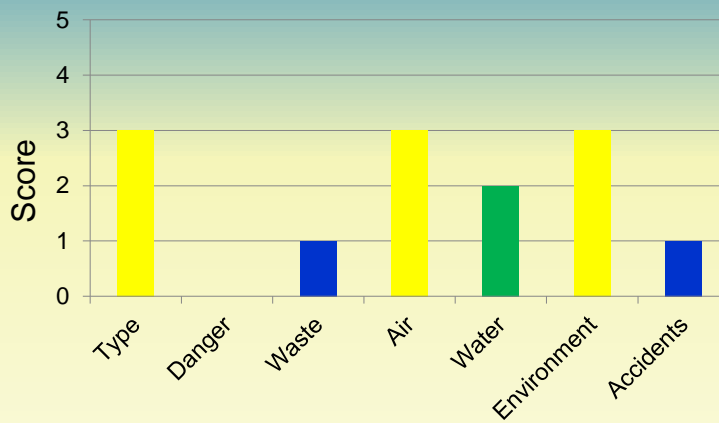
Scored Risk Criteria



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17

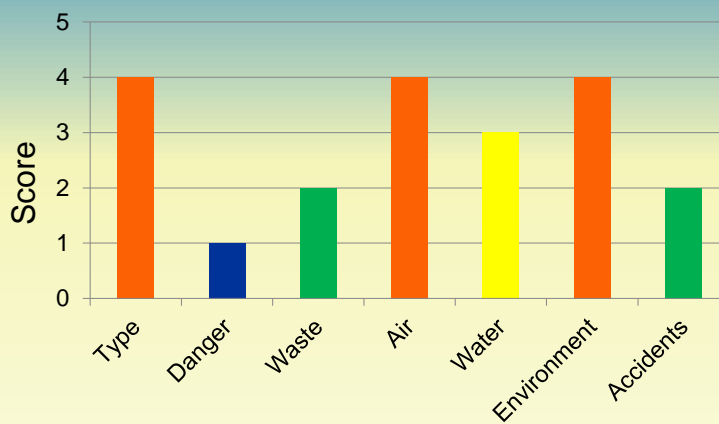
Good Operator Performance



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18

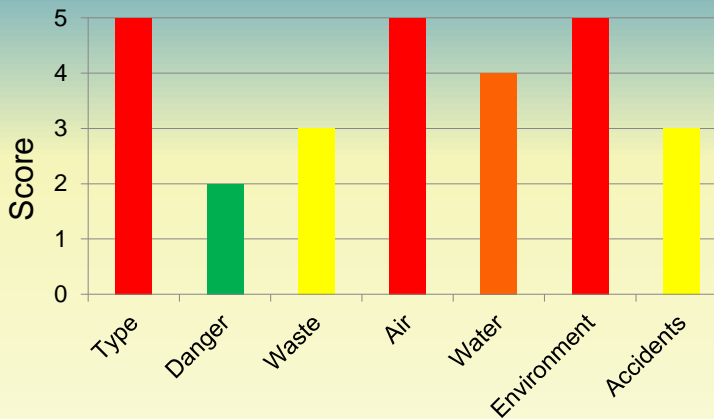
Scored Risk Criteria



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Bad Operator Performance



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20

Integrated Risk Assessment Method

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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

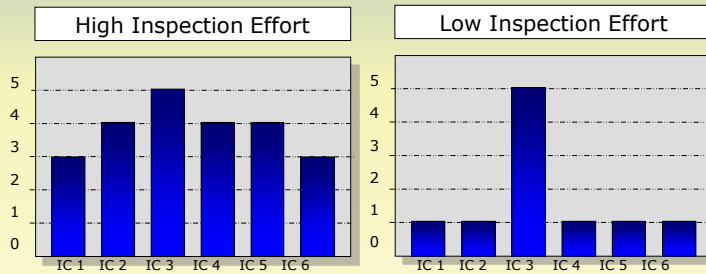


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IRAM Principles II and IV: Inspection Frequency and Effort

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Weight

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



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23

Web Tool and Database

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- 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>



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24



Lucom Interaction Platform

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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 logos is a navigation bar with a language dropdown 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 content 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

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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



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25



Lucom Interaction Platform

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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



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26



Lucom Interaction Platform

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Assessment done by

Inspection object ID

Inspection task

Date of inspection plan

Integrated Risk Assessment

Address data

Street

Postal code Location



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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


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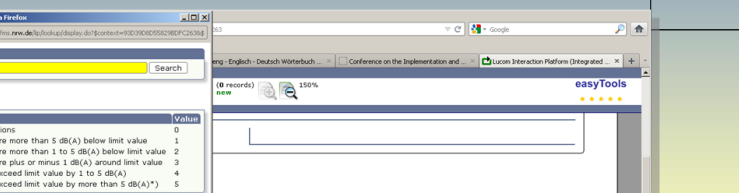
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28



Lucom Interaction Platform





The screenshot displays the Lucom Interaction Platform interface. On the left, a search criteria panel is open, showing a list of noise-related criteria and their corresponding values. The main area shows a table of environmental impact factors, including categories like 'Impacts on human health or the environment', 'Releases to air', 'Releases to water / off-site transport in waste water', 'Releases to land', 'Off-site transfer of waste', 'Input of waste', 'Quality of the local environment', 'Sensitivity of the local environment', 'Risk of accidents', and 'Noise'. Each row has columns for 'Maximum score', 'Score', and 'Shift of score (weight)'. The 'Score' column shows a progress bar and a numerical value. The 'Shift of score (weight)' column shows a numerical value. The 'Noise' row is highlighted, showing a maximum score of 5, a score of 5, and a shift of score of 0.

	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
Noise	5	2	0

Assessment Results

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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

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30

IRAM Inspection Program

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	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

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31

Guidance book

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



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32

Cologne Workshop Conclusions

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- 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



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33

Utilisation of IRAM

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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, Kosovo, Luxembourg, Macedonia, The Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Turkey



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34

Any Questions?



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35