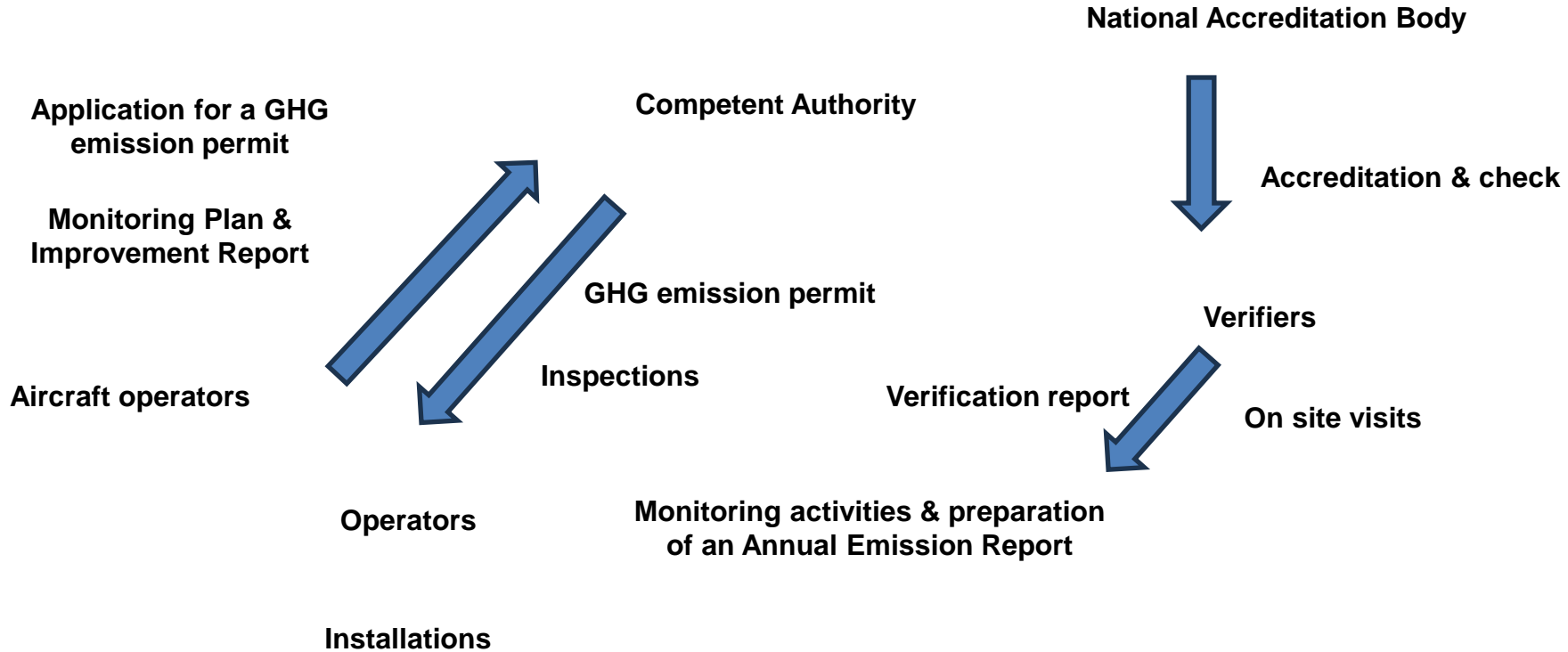


Establishing the MRV in EU Member States – lessons learnt

Peter Pozsgai, Governance Expert,
Energy Community Secretariat
5 July 2023, Vienna

- The MRV(A) framework in the EU has been constantly refined for 10+ years:
 - ❑ **Evolution** of the ETS and MRV related rules (MRV was based initially on [guidelines](#) as an Annex to the ETS Dir.);
 - ❑ **Improvement** of the compliance monitoring;
 - Regular events “EU ETS Compliance Conferences” with dedicated working groups – including on compliance monitoring from 2008 (Phase II) → initially **IT and the method for information collection** was a major issue;
 - In 2012 (Phase III), a dedicated MRV work stream was established (precursor of the MRR);
- Regular exchange of information, questions, experience, solutions + feedback to the legislative process;
- There was no “perfect” implementation from the beginning, it is a process of constant improvement;

Context



Topics for discussion:

- **Competent Authorities;**
- **Nr. of installations;**
- **IT reporting and infrastructure;**
- **Penalties and fines;**
- **Process and cooperation.**

Competent Authorities

- Various solutions based on national specifics;
- Most of the time more than 1 authority is involved in the compliance process;
- Coordination among authorities both on national and regional level is key;
- Inspections – link to other inspection activities (e.g. IED, waste management, water protection);

Organisational chart of national EU-ETS implementation in FLANDERS

– illustrating the hierarchy and/or relations between the actors –

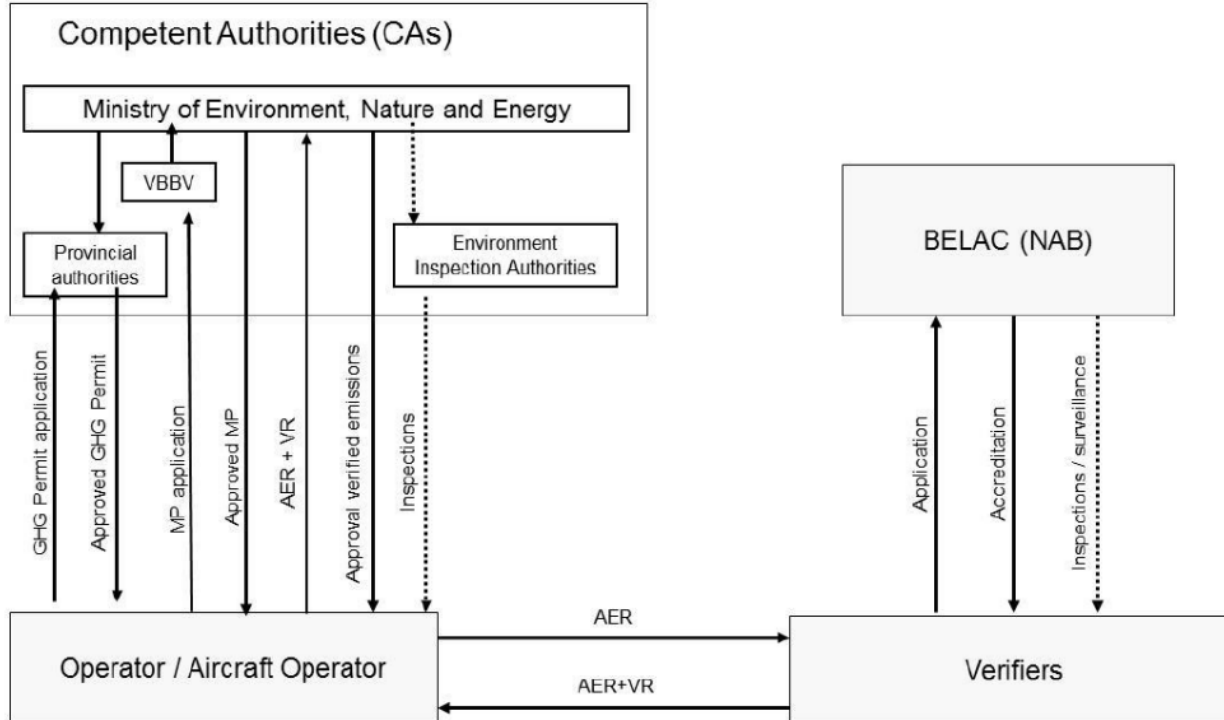
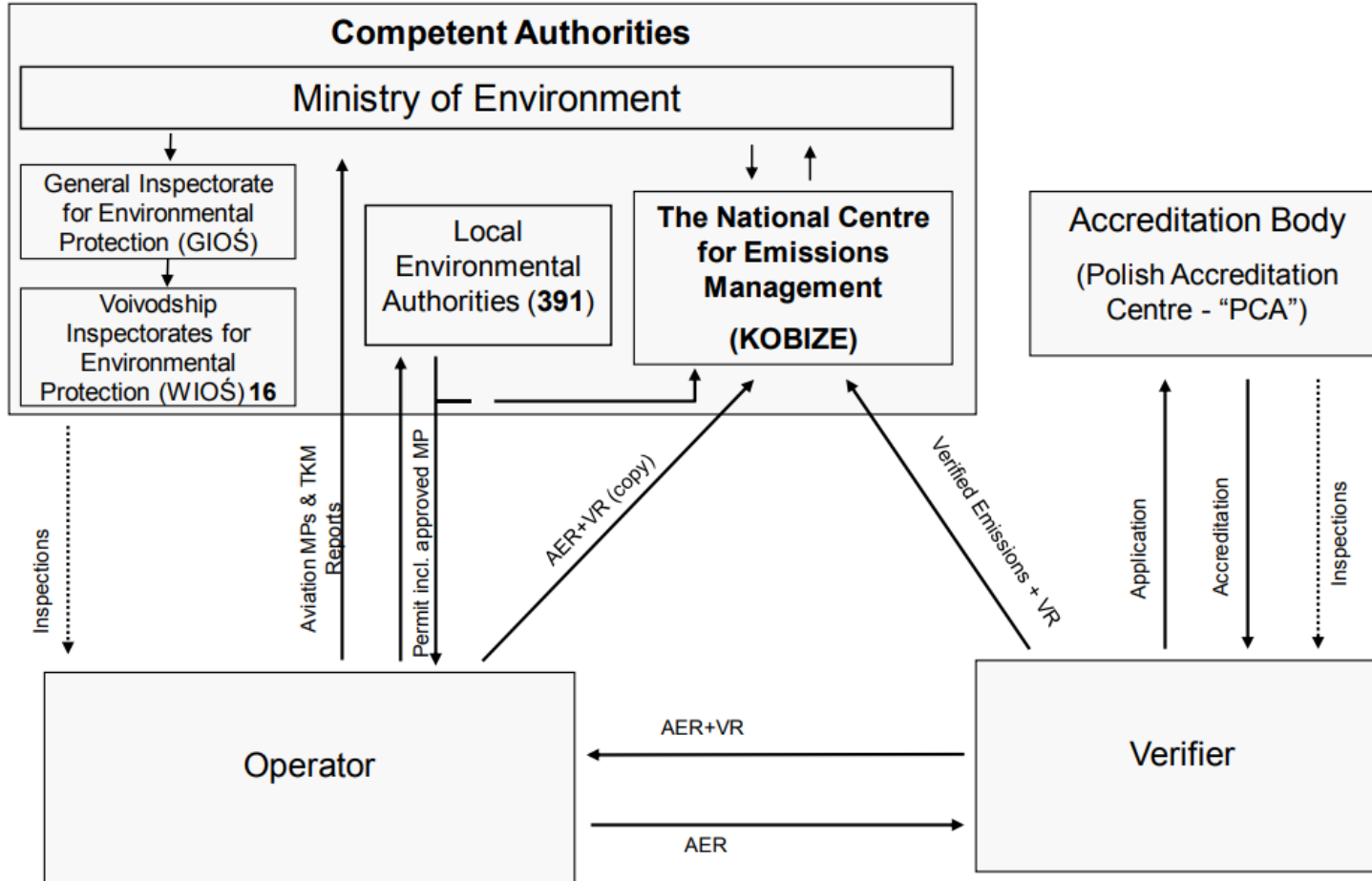


Figure 1 Organisational chart of EU ETS implementation in the Flemish Region

[Source](#)

*Verificatiebureau
Benchmarking Vlaanderen
(VBBV)

Competent Authorities – Poland



Competences in Germany

- Federal States (Länder): Permits, validation and approval of monitoring plans
- DEHSt: Control (inspection) of emissions reports, enforcement and sanctioning
- In practice close cooperation has been implemented:
 - DEHSt-Länder-Task Force since 2004
 - Common templates for monitoring plans and electronic emission reports
 - Coordinated FAQ and other information for operators and verifiers

Nr. of installations

- It is constantly changing due to closures, new entrants, changes in category because of activity level
→ the overall number and the split across categories largely influences the compliance control;
- Small emitters – special rules with easier compliance – aircraft operators with fewer than 243 flights and AOs with emissions less than 25 000 tonnes CO₂ per year;
- Installations with low emissions – average verified annual emissions less than **25 000** tonnes of CO_{2(e)} per year;
- Category A: average verified annual emissions are equal to or less than **50 000** tonnes of CO_{2(e)};
- Category B: [...] more than **50 000** tonnes of CO_{2(e)} and equal to or less than **500 000** tonnes of CO_{2(e)};
- Category C: [...] more than **500 000** tonnes of CO_{2(e)}.

Frequency of conformity audits

- ▶ all ETS installations are audited in the period 2013-2016:
 - category C installations: yearly
 - category B installations: two yearly
 - category A installations: once in 4 years

Installations	Number
Installations with low emissions	111
Category A installations (excluding installations with low emissions)	42
Category B installations	46
Category C installations	18
Total number of installations	217



ETS Installations in Cyprus for inspection



- ▣ 3 Combustion installations for the production of energy
- ▣ 1 installation for the production of cement clinker
- ▣ 8 installations for the manufacture of ceramic products and refractory bricks

For each sector, specific inspection checklist is developed



The EU ETS Inspections

- There are around 600 installations in Finland
 - 500 "A" category (5% of total CO₂), 70 "B" category (25% of CO₂) and 30 "C" category (70% of CO₂)
- Most of the installations are district heating plants and power plants (combustion)
- The Energy Authority (competent authority) is responsible for the ETS inspections of installations excluding Åland (small autonomous island, own competent authority)

Nr. of installations – Germany

Installation category	Number of installations in Germany		Total annual emissions per year	
Category C (> 500 kt CO ₂ -eq/yr)	133	7 %	246.4 million t CO ₂ -eq	77 %
Category B (> 50 and < 500 kt CO ₂ -eq/yr)	384	21 %	56.6 million t CO ₂ -eq	18 %
Category A (≤ 50 kt CO ₂ -eq/yr)	1,300	72 %	17.3 million t CO ₂ -eq	5 %
of which are low emitters < 25 kt CO ₂ -eq/yr	1,050	58 %	8.5 million t CO ₂ -eq	3 %
total:		1,817	320.3 million t CO₂-eq	

Nr. of installations – Hungary

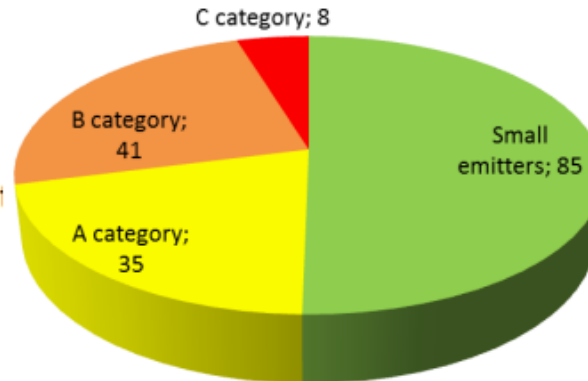
169 installations

Hungarian laws (inspection at least every 5 years)

Period: between 1st April and 15th December (because of the verification)

How we select the installations:

- big emitters: category B and C,
- emitters with the oldest or old permit
- emitters with brand new permit,
- when verifiers have found any kind of difference during the verification process (outstanding non-conformities or recommendations for improvements)



Nr. of installations – Italy

THE ITALIAN PROJECT ON EU ETS INSPECTIONS



MINISTERO DELL'AMBIENTE
E DELLA TUTELA DEL TERRITORIO E DEL MARE

Italian Installations



1023 stationary plant (2017)

- Combustion 39%
- Thermoelectric 16%
- Paper production 12%
- Ceramic production 11%
- Glasses production 5%
- Steel production 8%
- Clinker production 3%
- Dolime production 2%
- Refinery 1%
- Others 3%

- 72% A category
- 22% B category
- 6% C category

Emissions 2017:
155 Millions of tCO₂:

- 8% A category
- 25% B category
- 67% C category



Nr. of installations

Ireland

100 installations and 3 site inspectors → the 3 site inspectors also issue GHG emissions, permits, approve Monitoring Plans, review Annual Emission Reports and assess Activity Level and Capacity Changes

[Source](#)

Romania

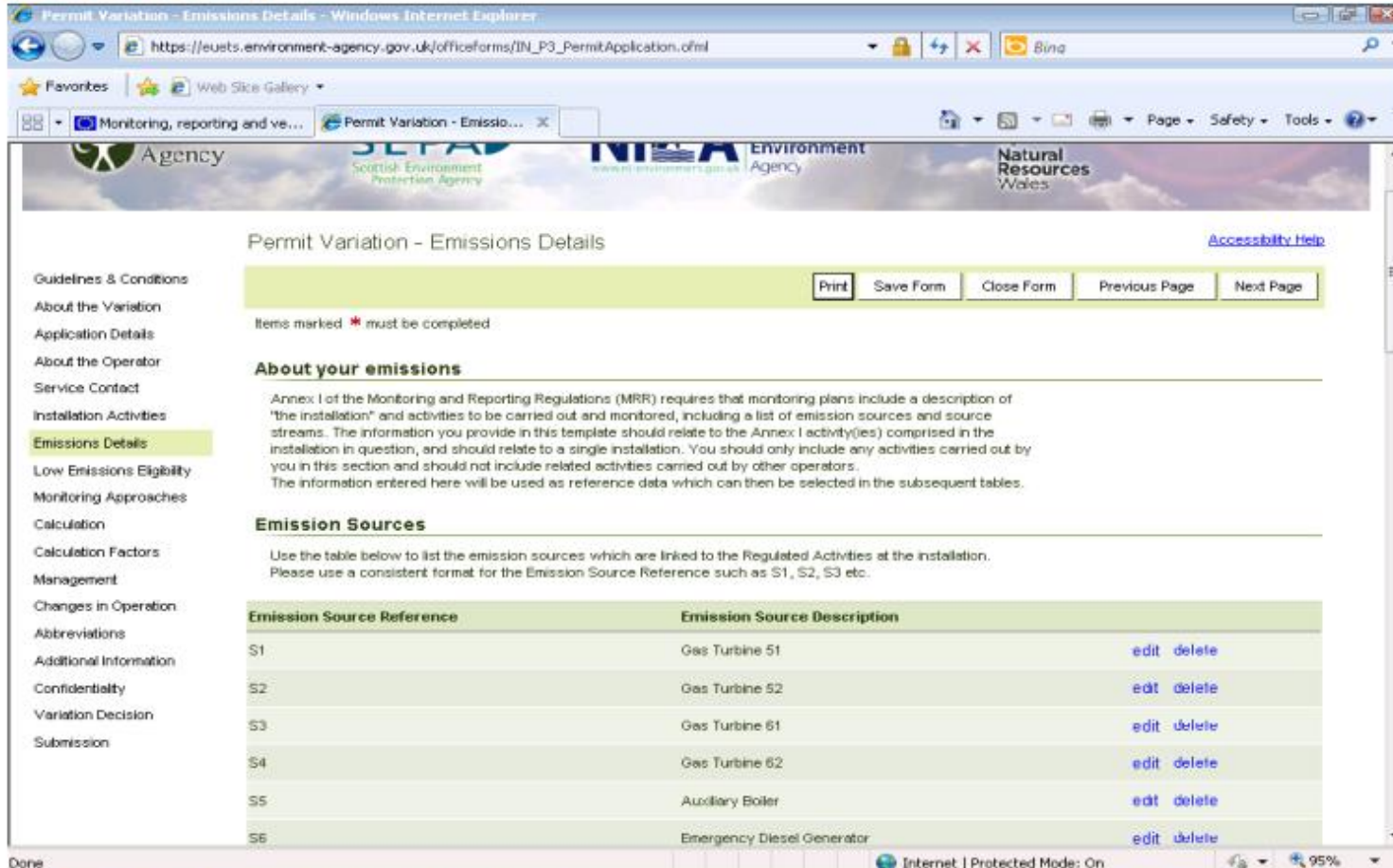
Around 150 installations, 7 verification bodies, in the NAB
8 persons for working with verifiers

Source: 10th
EU ETS
Compliance
Conference

IT reporting and infrastructure

- Divergence across national solutions;
- Constant brainstorming how to develop more advanced tools easing the burden on operators, verifiers and Competent Authorities;
- Paper → MS Excel → more complex IT systems;
- Member States free to use any tool for MRV IT, BUT common tool developed by the Commission → DECLARE;
- Systems are constantly updated → the following slides are just for illustration;

ETSWAP



Permit Variation - Emissions Details

Print Save Form Close Form Previous Page Next Page

Items marked * must be completed

About your emissions

Annex I of the Monitoring and Reporting Regulations (MRR) requires that monitoring plans include a description of "the installation" and activities to be carried out and monitored, including a list of emission sources and source streams. The information you provide in this template should relate to the Annex I activity(ies) comprised in the installation in question, and should relate to a single installation. You should only include any activities carried out by you in this section and should not include related activities carried out by other operators. The information entered here will be used as reference data which can then be selected in the subsequent tables.

Emission Sources

Use the table below to list the emission sources which are linked to the Regulated Activities at the installation. Please use a consistent format for the Emission Source Reference such as S1, S2, S3 etc.

Emission Source Reference	Emission Source Description	
S1	Gas Turbine 51	edit delete
S2	Gas Turbine 52	edit delete
S3	Gas Turbine 61	edit delete
S4	Gas Turbine 62	edit delete
S5	Auxiliary Boiler	edit delete
S6	Emergency Diesel Generator	edit delete

Actual benefits of using IT – UK's experience with ETSWAP

- ⇒ 5 competent authorities (CA's) meeting ETS Legislation in a **consistent manner**
- ⇒ Ensured **efficient and timely** monitoring plan approvals of 1200 operators in time for the start of the Phase 3
- ⇒ **Automated reminders** ensure the relevant parties are aware of what outstanding actions they have
- ⇒ **Accessible** via an internet connection by all users
- ⇒ Workflow ensures **tasks are completed** within the compliance cycle
- ⇒ From feedback received IT has minimised the regulatory **admin burden** on both the operators regulators who use it
- ⇒ **Avoided the need** to significantly expand the regulatory team to administer manual processes of permitting, monitoring, and compliance.

[Source](#)

Options IT-system Wallonia

Options:

1. Development new system by AwAC/Wallonia
2. Development new system (from zero) by consultant
3. Use an existing IT-system with minor modifications

Requirements

- System compatible with phase III
- ASAP available (deadline MP: sept/octobre 2012)
- Language (FR/ENG)
- Reasonable costs



ETSWAP (used by UK/Ireland and developed by SFW)

Timeline contract negotiations AwAC-SFW



[Source](#)

IT reporting and infrastructure – Belgium – Wallonia

Development ETSWAP Wallonia

Source

- Development spread over 2 years (2012/2013)
 - Human resources
 - Time restrictions
 - Availability of phase III-documents (templates, etc)

- Release 1: delivered in September 2012
 - Based upon 1 workshop + several conference calls
 - Scope: MP
- Release 2: delivered in April 2013
- Release 3: foreseen before end 2013

ETSWAP: what's in?

- General informations about operators (fix installations/aviation)
- Monitoring Plans (phase III) + modifications
- Improvement reports
- AEM-reports + verification reports
- Inspections + reports
- Allocations: new entrant reserve/significant capacity/ partial cessations/definitive cessations
- Transfer
- Non-compliance
- Art. 21 report
- Other output-reports possible

- Operational unit of ETS-team (2/3 persons)
 - Fluctuating workload
 - Input for development
 - 1st help for operators = AwAC

- Our tasks during development phase
 - Workshop or conference call to discuss existing functionalities
 - Evaluate and modify forms/workflows/output documents
 - Testing before going 'live'

IT-Infrastructure of DEHSt – main Components

Internet Portal – External Users

- Government Site Builder (GSB) provides websites
- **Form-Management-System (FMS)** provides electronic forms for data collection
- **Virtual Post Office (VPS)** supports electronic encryption and signature

Internal Systems

- **Workflow System** and Document Management (**DOMEA**)
framework for integration, electronic record and workflow management
- **Installations Database (ADB)**
Calculation and allocation of Emission Allowances (EUA), reporting of emissions and accounting
- Additional IT tools e.g. central address management, fee and budget management

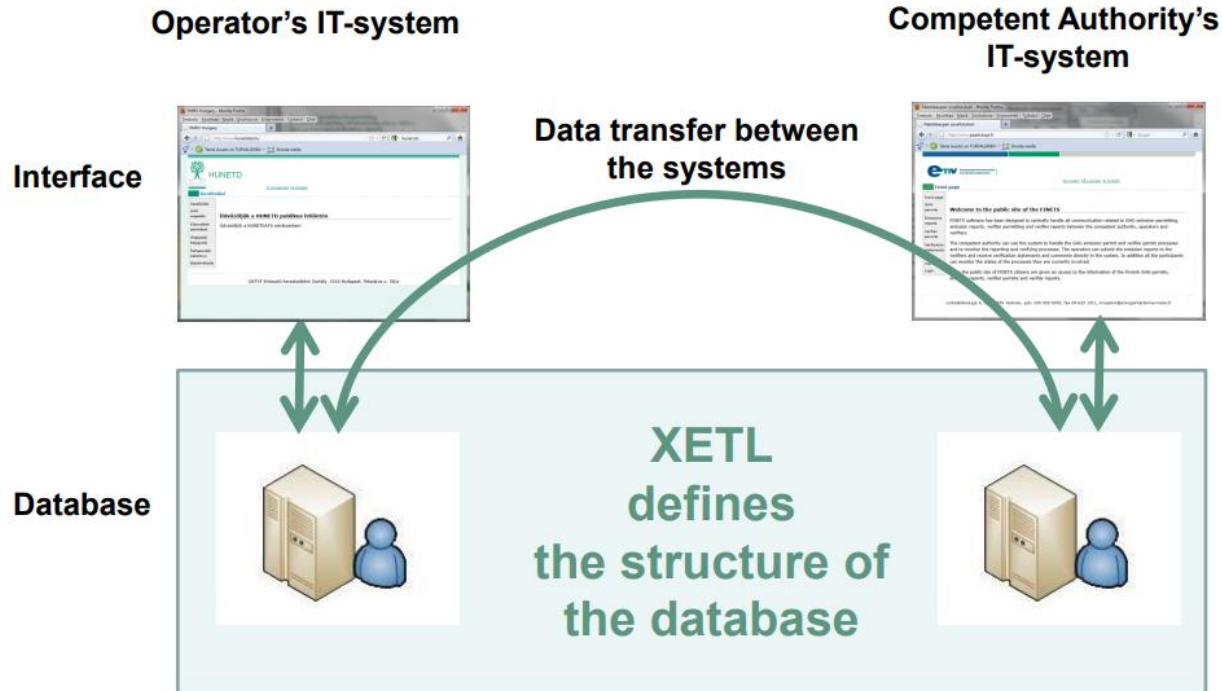
Why is XETL relevant? What can it do?

- ⇒ **XETL – EU ETS reporting language** (data exchange format)
- ⇒ Imagine a large pot with data in it, using this format – **automated systems, computers can** pull this data out and populate where and when you need it e.g. Annual Emissions Report
- ⇒ **Operators using this format** will be able to handle their data more easily
- ⇒ **Communicate with different systems**
- ⇒ Allows **automated population** of systems, forms or templates
- ⇒ **Applies validation** rules, so drives improved quality

[Source](#)

IT reporting and infrastructure – XETL

Principle of XETL; same databases, but different interfaces



Phase IV – New features

DECLARE will offer 2 modes of submission:

For MS
without an
IT system

1. Web forms

- By the Installation Operators
- Increase user guidance
- Data accuracy and reliability

For MS willing
to keep their
own IT system

2. XETL

- For machine to machine data exchange
- Interoperability
- Allow for comparison and transparency
- Reusability (pre-fill Art. 21...)



DECLARE MRV (e-reporting) Roadmap

May 2020
Acceptance tests

July 2020
Ready for use

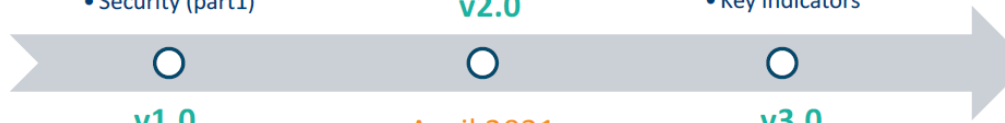
- ✓ • Organisations
- ✓ • User registration
- ✓ • Authorisation
- Dashboard (follow-up)
 - Monitoring Plan
 - MP notifications
 - Security (part1)

January 2022

- Improvement Reports
 - Article 21 pre-fill
- Version comparison
 - Dashboard (Key indicators, alerts)
 - Key indicators

To be planned

- Link to CORSIA Reporting Tool
- Customized extractions
- Continuous improvement



v1.0

v2.0

v3.0

April 2021

Annual Emission Reports
Verification Reports
AER/VR notifications

XETL

- Task list
- Security (part2)



Summary

- ➔ Automated systems bring benefits to all users, who must do repetitive tasks
- ➔ IT improves quality of returns, removes human error
- ➔ **Enables resources to be freed for other duties such as compliance checking**
- ➔ Data format will improve quality and ease report delivery
- ➔ Can deliver a common CO₂ reporting format across Europe/Globally

[Source](#)

To consider when developing IT

- Implementing only the critical functions in the first phase
 - Consideration of properties needed
 - Specify first, implement then
 - Start by implementing only the properties with highest priority
 - Developing a tailored solution is often more costly, takes more time and doesn't in all cases lead to a better result than purchasing a ready-made software product
- Integrations should be considered carefully
 - Often costly to implement, but can lead to considerable cost savings in the long run
 - Help to increase data quality and to offer better service to the end users
- Helpdesk service is appreciated
 - Some operators are using the system only once per year
 - Some operators need guidance

2015 European Court of Auditors report

- EC to further amendments to strengthen MRV
- Require CAs to improve enforcement practices to give assurance of the quality of the control framework;
- MSs to Implement coherent, effective control frameworks, including inspections for MRV
- better coordination and exchange of information between CAs and NABs to improve the quality of verification

Penalties and fines

- Defining fines by a calculation formula, e.g., taking into account the number of days the issue is not resolved, the number of free allowances involved, the market price for EU ETS allowances, the tonnes of CO₂eq emitted or the company's turnover.
- Leaving it up to the courts to decide on the size of fines (e.g., Denmark, Finland).
- Imposing additional daily penalties or an additional sum on top on minimum and maximum fines.
- Setting a fine based on a percentage of the turnover of a legal person or basing the amounts on the income of the person on which penalties are imposed.
- Defining fines in legislation

(Hungary, per day) to € 75,000 (France) per infringement and the maximum ranges from €102 plus the allowance price (Liechtenstein, per tonne CO₂) to € 16 million (Estonia). In 22 countries, the size of fines differs between the types of infringements. **7 countries provide for the possibility of a jail sentence of up to 120** months for some or all types of infringements. France is the only country that has indicated a minimum jail sentence: a period of 12 months for operating without a permit or failure to comply with the conditions of the permit. Some countries provide the option to impose penalties other than fines and jail sentences. For example, Greece provides the option to shut down an installation for a period between 5 to 20 days.

Process and cooperation

In the EU it took several TF meeting to sort out the details and discussions are going on annually even now

▪ Objectives of the Task Force (TF) are

- to discuss in an open exchange of views, the questions and issues of the MRR
- aiming at jointly agreed solutions
- to provide the Commission with input for Gu papers and FAQs.

▪ General information

- Kick-off meeting Nov
- Members and participants up to now: AT, BE, DK, EE, FR, FI, DE, HU, IT, NL, NO, PL, PT, ES, SE, UK + COM, UBA Austria
- So far 12 meetings in

▪ Proposed Questions to be answered at the Table

- How is the MP approval process organized?
- How far have you come?
- Have you established checking priorities?
- What are the main challenges of the process and enforcement of the MRR?

▪ 13th Task Force Monitoring meeting

- Date: 1 July 2013
- Meeting Venue: DEHSt, Berlin
- Video conference facilities available
- On the Draft Agenda: e.g.
 - Closing data gaps
 - Proposal for Annex VII 'Frequency of Analysis' according to article 35 (1) MRR,
 - Methods to calculate biogas injected into and removed from a gas network according to Art. 39 (3) MRR
 - Questions exchanged by E-Mail since the last meeting

Contact information: Doris.tharan@uba.de



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FOR YOUR ATTENTION

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