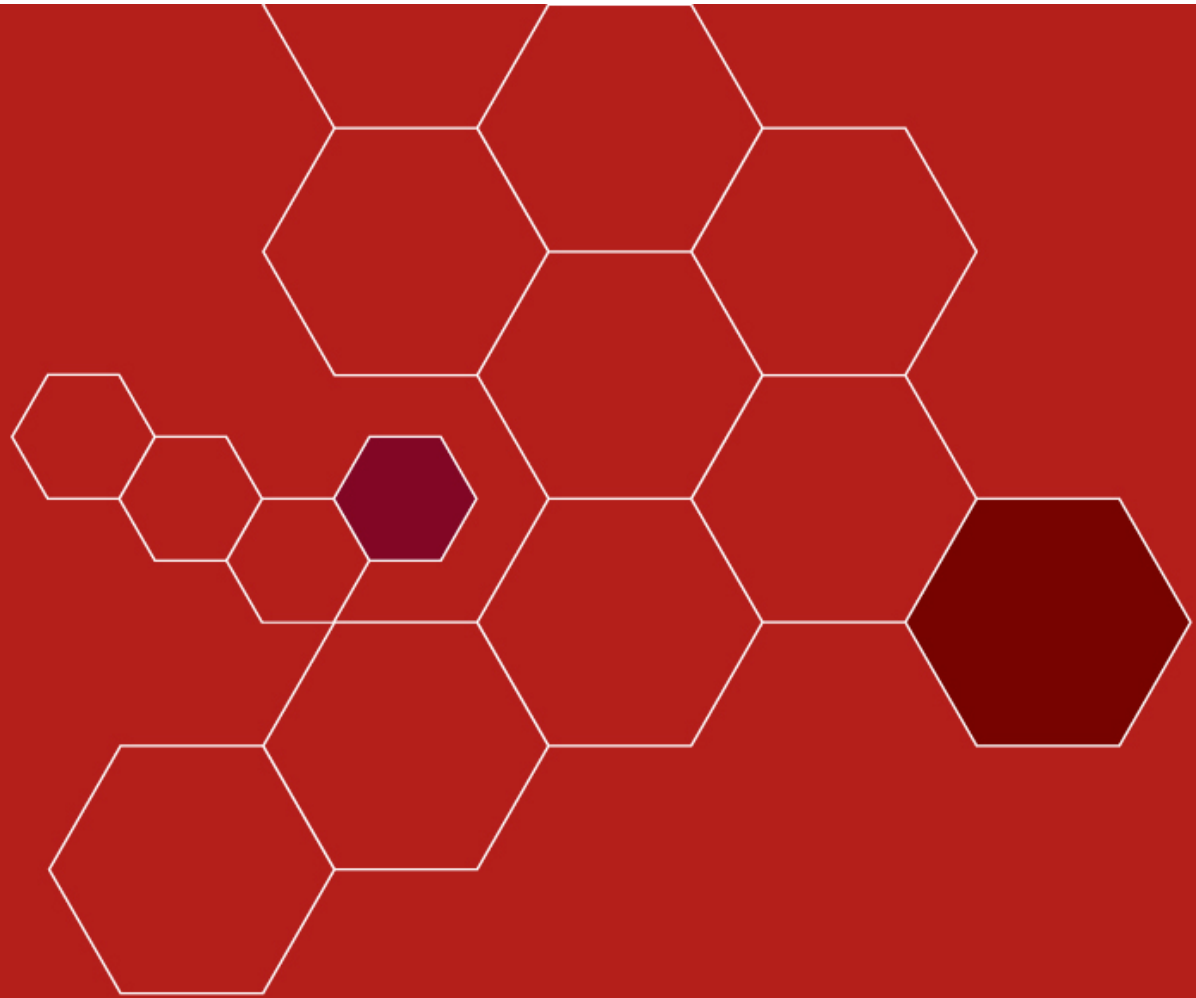Noise in the Built Environment

29 – 30 April 2010

Ghent

Updating the Electronic Noise Data Reporting Mechanism (ENDRM) to support Member State reporting under the END
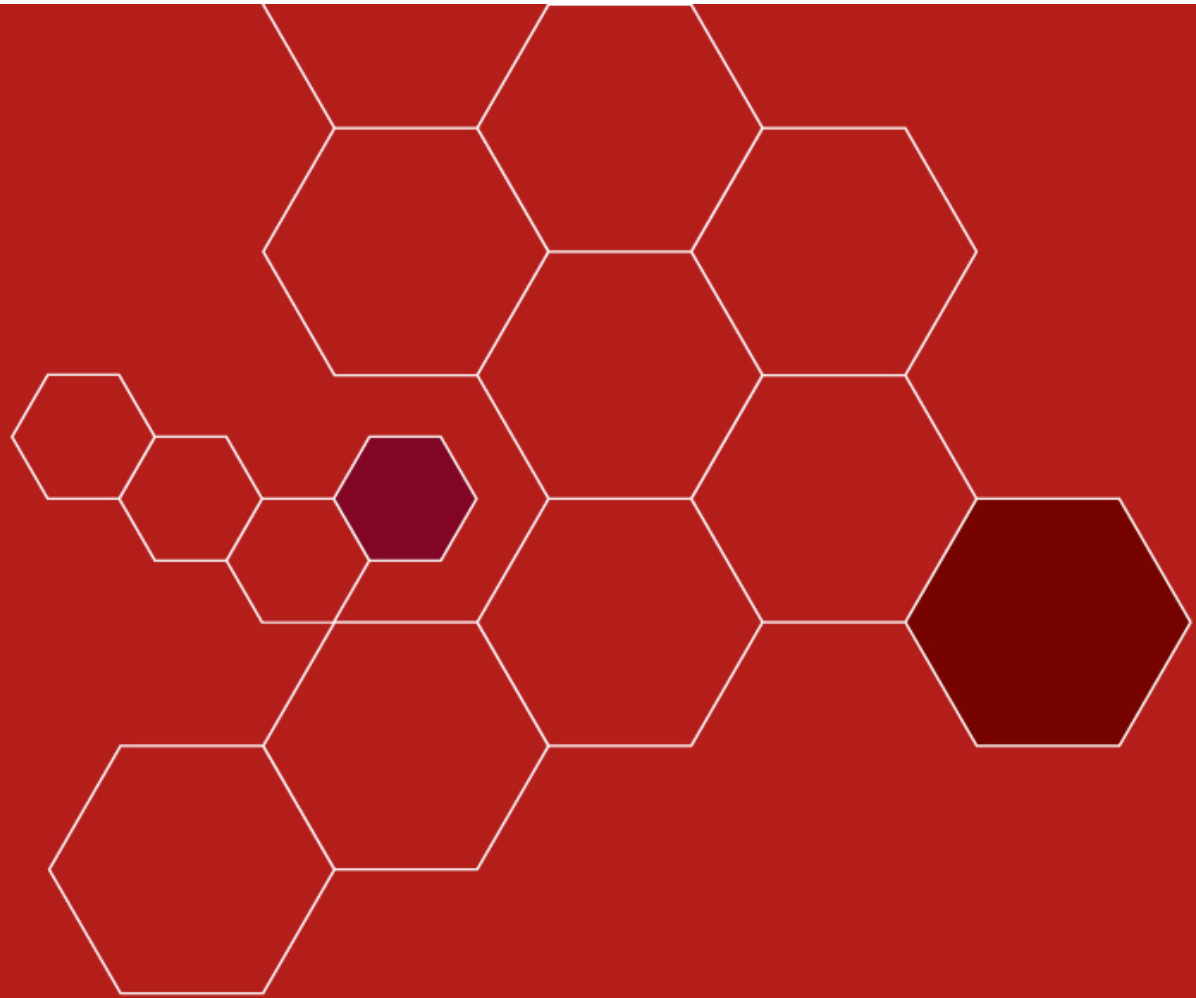
Nigel Jones, Director

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Overview

Presentation Overview

- CNOSSOS-EU and Task 9 "Updating of the ENDRM"
  - CNOSSOS-EU
  - Requirement for Task 9
  - Expert Group
- Lessons Learnt
  - Using ENDRM in Round 1
  - Using Reportnet
  - Challenges of using MS Returns
- Future Considerations
  - Further developing ENDRM and Reportnet
  - Improving relevance of data
  - Aligning with CNOSSOS-EU

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CNOSSOS Task 9:

Updating the ENDRM

Common NOise aSSessment methOdS in EU (CNOSSOS-EU)

- EC require a common understanding of noise climate across European Member States
- This requires a common assessment method
- Expert meeting in march 2009 identified wide range of methods used in END R1
- Method - not just 'acoustic calculation' method
- CNOSSOS-EU established at end of 2009
- National experts involved in 9 Tasks
- CNOSSOS-EU designed to compliment the END Review work

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Common NOise aSSessment methOdS in EU (CNOSSOS-EU)

1. Co-ordination Group
2. Road Noise Source
3. Railway Noise Source
4. Industrial Noise Source
5. Noise Propagation
6. Aircraft Noise Source
7. Guidelines for use of CNOSSOS-EU
8. Population Exposure
9. END Reporting Mechanism Update

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Common NOise aSSessment methOdS in EU (CNOSSOS-EU)

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7. Guidelines for use of CNOSSOS-EU
8. Population Exposure
9. **END Reporting Mechanism Update**

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Requirement for Task 9 – Update of ENDRM

- Review

- Experiences of reporting on END Round 1
    - From MS perspective, and
    - From and EEA/EC perspective
- Feedback received from NRCs
    - How effective were the ENDRM Handbook and templates?
    - What would they change?
- Reportnet now officially available for 4 Dataflows (DF1, DF5, DF6 and DF7)
    - How have MSs fared when using Reportnet?
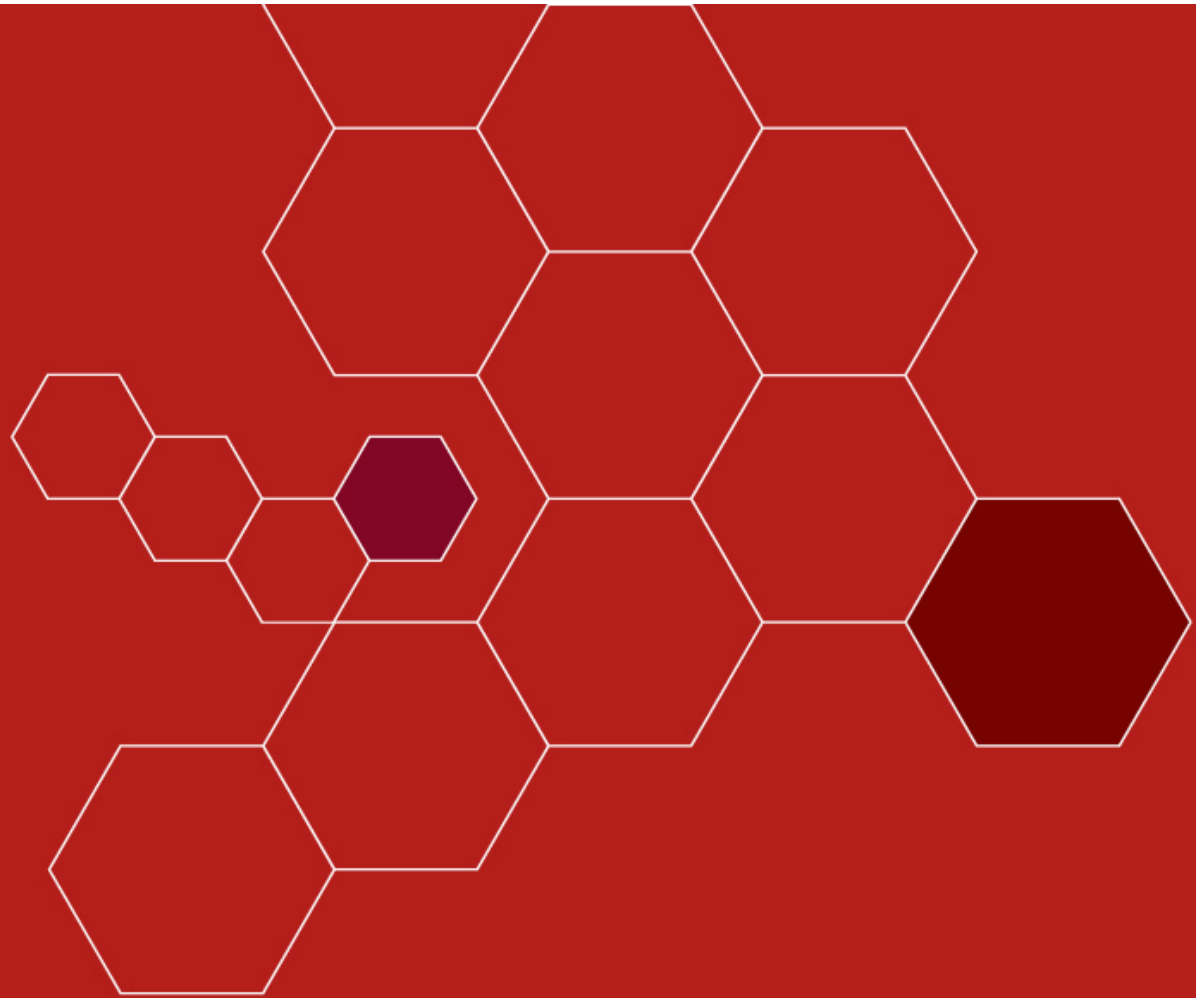
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Requirement for Task 9 – Update of ENDRM

- Also and opportunity to look forwards…..

- NOISE viewer launched
    - How could this be further developed to inform the citizen
- Provision of information to support EC policy requirements
    - Does the current ENDRM content support this?
- Impending update of DF1 (30 June 2010)
    - Inclusion in Reportnet (from this week!)
    - opportunity for MSs to fill any gaps
- Ensuring ENDRM integrates with Common Methods
    - To provide a better understanding of results

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Task 9 - Expert Group (1)

- Colin Nugent (EEA)
  - Task Leader and chair of EPON
- Anna Backman (EPoN)
  - Commissioned original 2007 ENDRM
- Juame Fons and Nuria Blanes Guardia (EEA ETC-LUSI)
  - QA and analysis of MS reports
  - Development of NOISE viewer
- Roman Ortner (UWB)
  - 'User' of ENDRM as NRC for Austria
- Nigel Jones (Extrium)
  - Architect of original ENDRM
  - 'User' supporting UK and Irish Governments
  - Drafting CNOSSOS-EU Guidelines
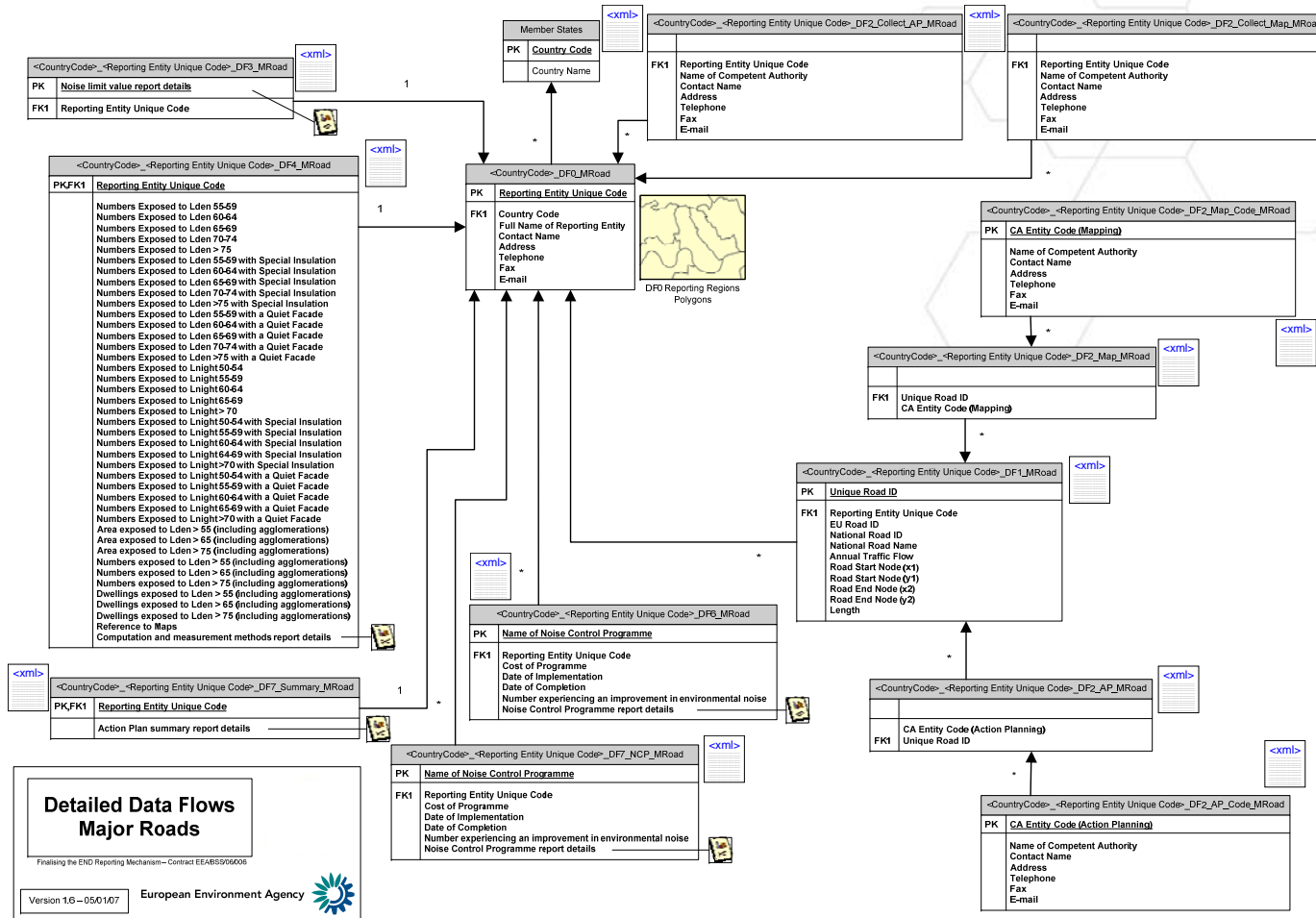
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Lessons Learnt

Lessons learnt - END Round 1

- The introduction of the ENDRM in 2007 helped in the reporting of information (especially from DF4 onwards).
- Around 80% of Member States have followed the ENDRM approach by using templates.
- But feedback has highlighted that…
  - ENDRM Guidelines document was complex to use
  - The need to follow the ID and referencing system was perhaps not fully appreciated by NRCs
  - The entity relationships have not always been followed
  - Guidelines on how to use within Reportnet were not included in 2007 version.
- Weaknesses in some technical aspects of END identified.

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Importance of Entities, IDs and their Relationships

Detailed Data Flows
Major Roads

Finalising the END Reporting Mechanism – Contract EEABSS/06006

Version 1.6 – 05/01/07

European Environment Agency

Restricted Draft

Reportnet

- Guidelines on the use of Reportnet were made available for DF5 onwards
- Use of Reportnet by Member States has increased significantly from DF5 onwards
  - >85% use Reportnet
- Reports now in a centralised location
- Reportnet is a properly managed data repository
- Templates now have a QA function built into them
- A few Member States not using Reportnet
- Some users not making use of all functions, e.g. QA
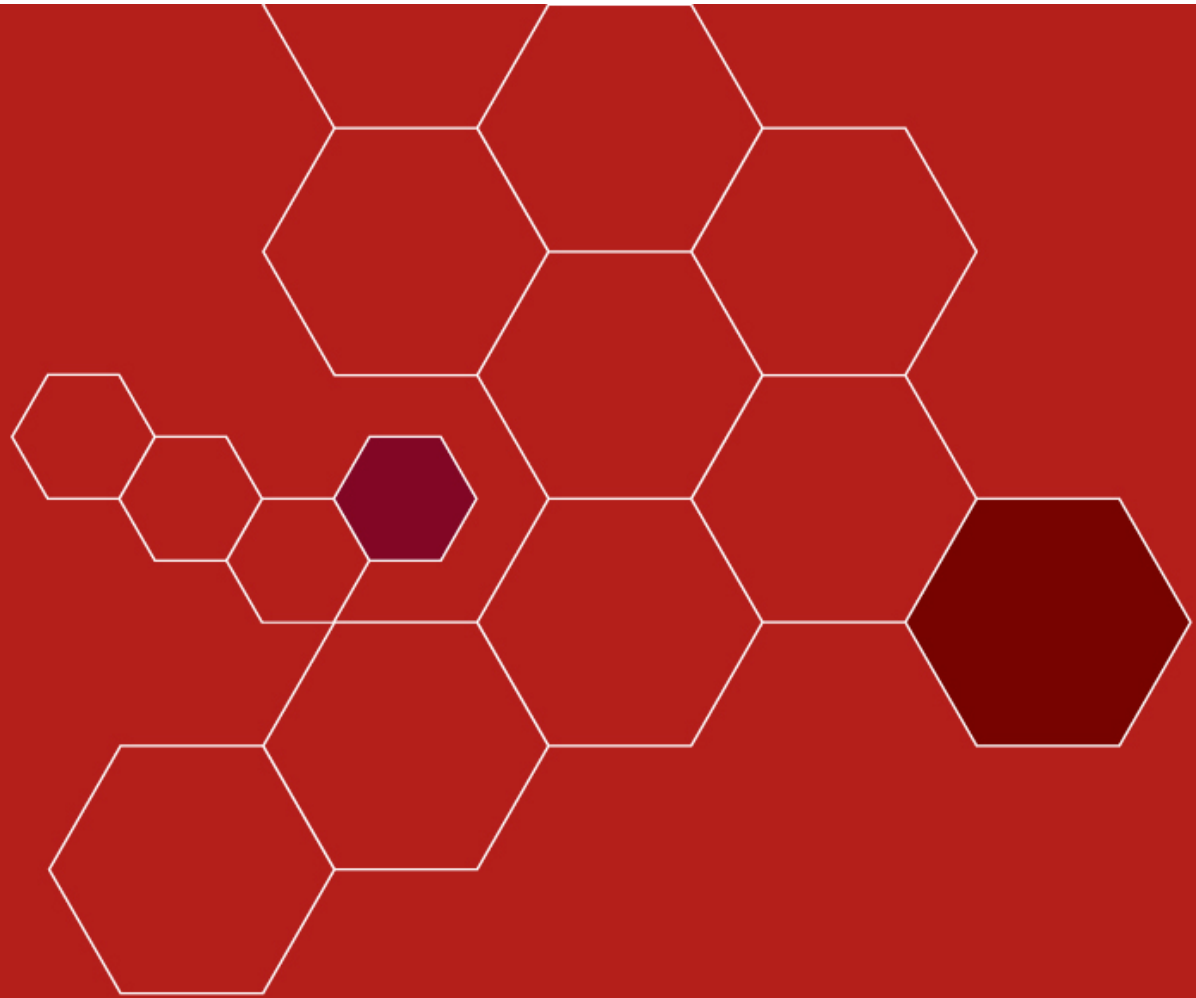- Not yet available for all Dataflows

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Challenges using MS Returns (1)

- The use of data reported under the ENDRM does not stop once data is reported…

- It is integrated into a European noise database
- It is used to support development of European noise policy
  - Feeds into TERM
  - Health impacts e.g. Night Noise Guidelines
  - Testing 'what if' policy scenarios
- It is used to support online mapping (NOISE)
  - So GIS format information is of value
  - Important to EEA/EC as it enables cross-policy analysis
- Following the ENDRM Guidelines are beneficial….

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Challenges using MS Returns (2)

- European noise database
  - Data needs to be standardised
- It is used to support development of European noise policy
  - Provision of information on probity of data
  - Reporting on time
  - Definitive data (sometimes updated information is supplied)
- Online mapping
  - Spatial data rather than tables or images
  - Many different spatial referencing systems
- It is helpful to use the entity model in the ENDRM
  - around 50% of MSs have reported DF7, but
  - already around 800 electronic files.

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Potential ENDRM Improvements

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Further developing ENDRM and Reportnet

- Further Guidelines on use of Reportnet have been issued this week to NRCs (v1.3)
  - Includes guidance on updating DF1
  - Noting that many MSs did this in reporting DF5
  - Also provides advice to other MSs who still need to report outstanding DFs
- Future development of web forms for data entry
- Enhancing the data dictionary
- Improvement of the ENDRM handbook
  - Provision of non-technical explanations
  - Grouping of reporting requirements by source (entity) to help NRCs coordinate internally with competent authorities
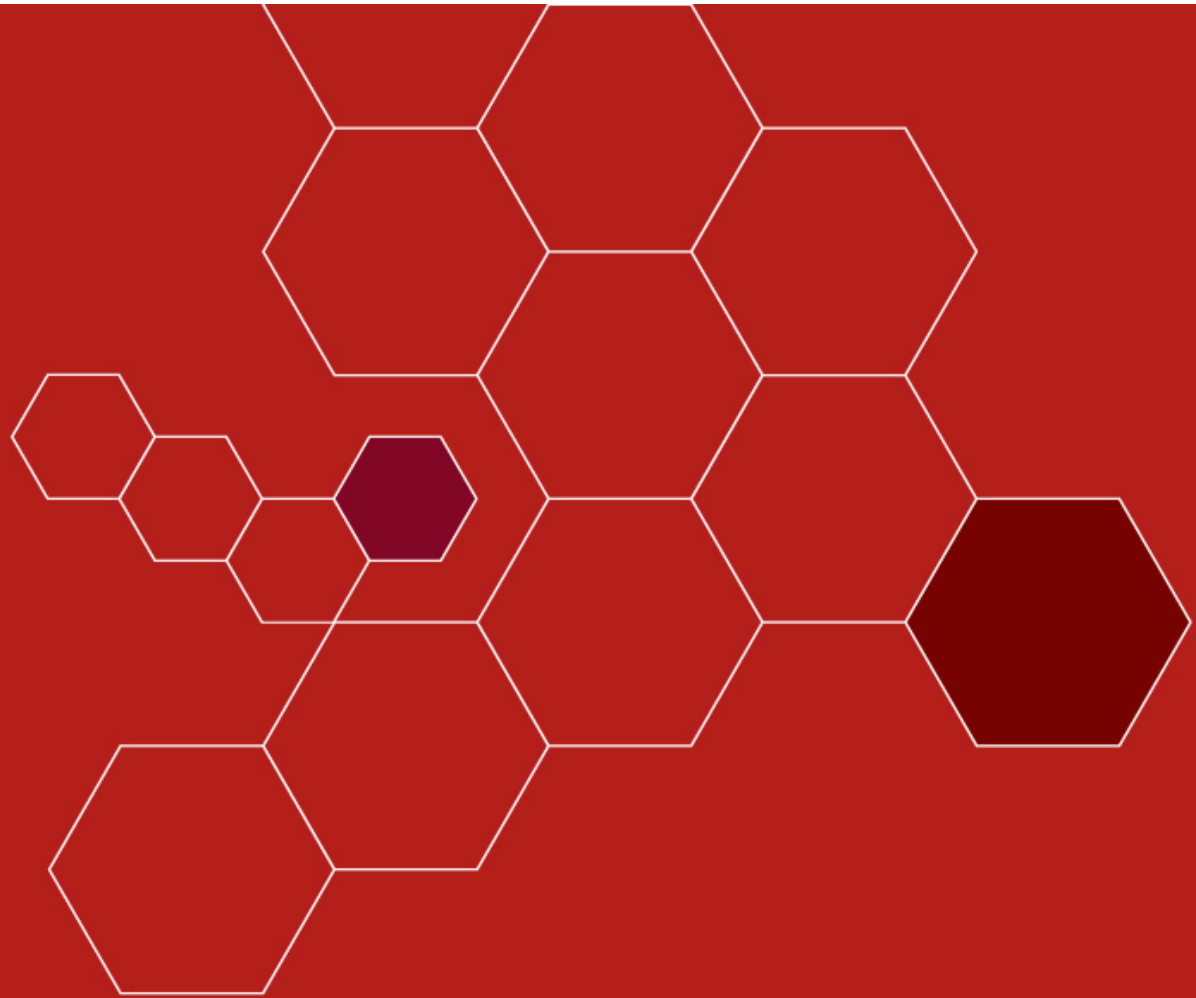
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Reviewing relevance of ENDRM content

- Reviewing content of ENDRM in response to new and developing policy requirements
  - Emerging health impact knowledge (WHO NNG)
  - Global assessment - how to consider the combined impacts from multiple noise sources at a single location (Quiet Area policy)
- Technical requirements of cross-cutting policies
  - Shared Environmental Information System (SEIS)
  - Inspire
- Has an implication on how data is defined, how mapping is undertaken and on the format in which it is reported

Aligning with CNOSSOS-EU

- ENDRM is a gateway through which MS noise information is captured by the EEA/EC
- It is important for the ENDRM to influence the approach to any Common Method, so that results are relevant
- How to define and document..
    - Sources (DF1 and DF5)
    - Data inputs (DF1, DF5, DF4 and DF8)
    - Calculation methods (DF4 and DF8)
    - Population exposure methods (DF4 and DF8)
- Common Method guidelines may take the form of an online tool
- Work likely to continue throughout 2010.

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Summary

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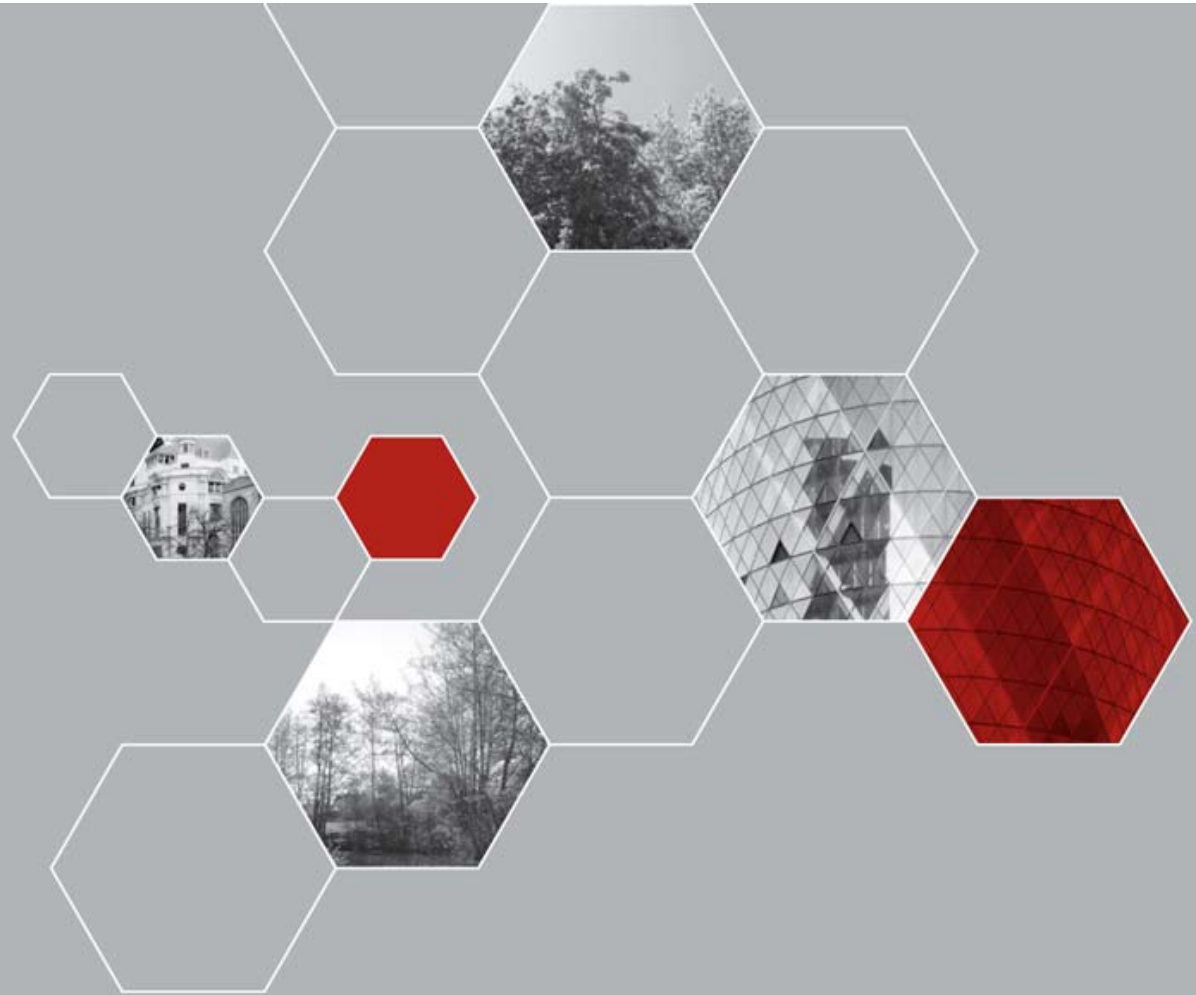 - Aligning with CNOSSOS-EU

Acknowledgements

- Colin Nugent
- Anna Backman
- Juame Fons
- Nuria Blanes Guardia
- Roman Ortner

Thank you

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