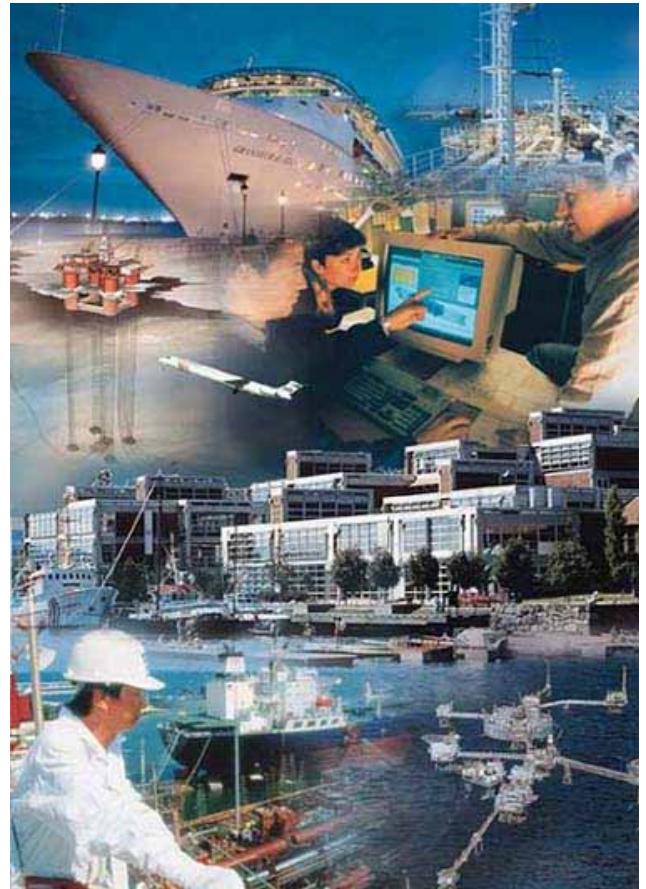


Pitfalls in CDM Project Monitoring



Einar Telnes
2006-11-13

- Leading CDM validation/verification body
- 6500 employees, most with scientific/technical MScs or PhDs
- Chair of the DOE/AE Forum
- Totally independent organisation
- Over 100 trained CDM auditors
- More than 300 offices worldwide

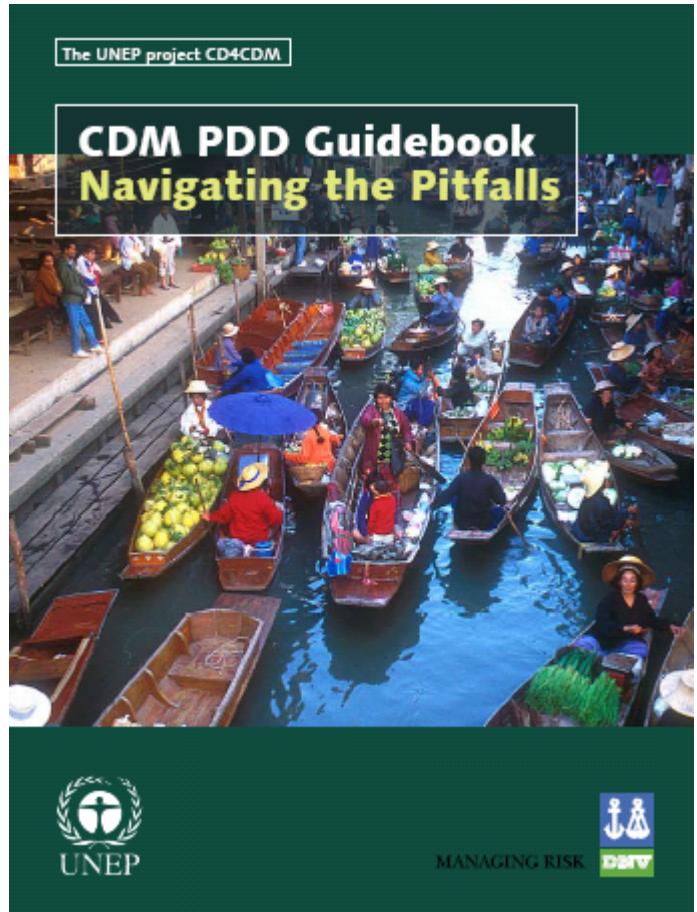


- Development of the guidebook:
 - process and methodology
 - Most important elements from a DOE's viewpoint
- Monitoring pitfalls: Verification experiences
- Next steps: Elements of an update of the pitfalls book

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Development of the guidebook - process

- The Guidebook was supported by the CD4CDM (Capacity Development for CDM) project, implemented by the UNEP RISOE Centre
- Gathering practical experience and research from DNV
 - DNV has validated over half of all CDM projects coming through to the validation stage.
 - Accredited for all industrial scopes under the CDM

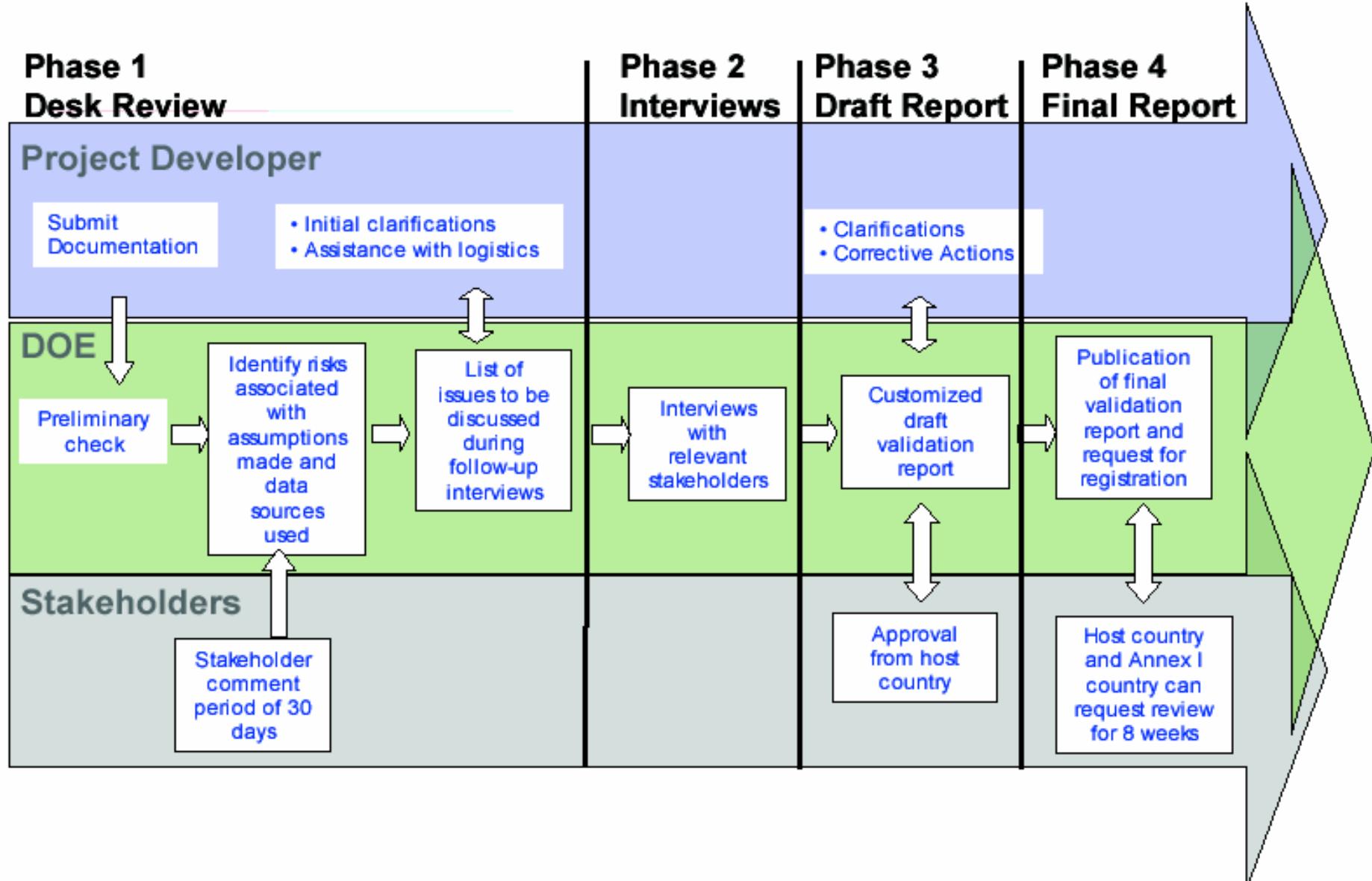


Development of the guidebook - methodology



- Analysis of about 150 PDDs and validation reports with regards to Corrective Action Requests
- Synthesis of 20 most common pitfalls with regards to the extent of delays as well as frequency
- Review by our international experts in Brazil, Poland, China and India

Steps in the validation process



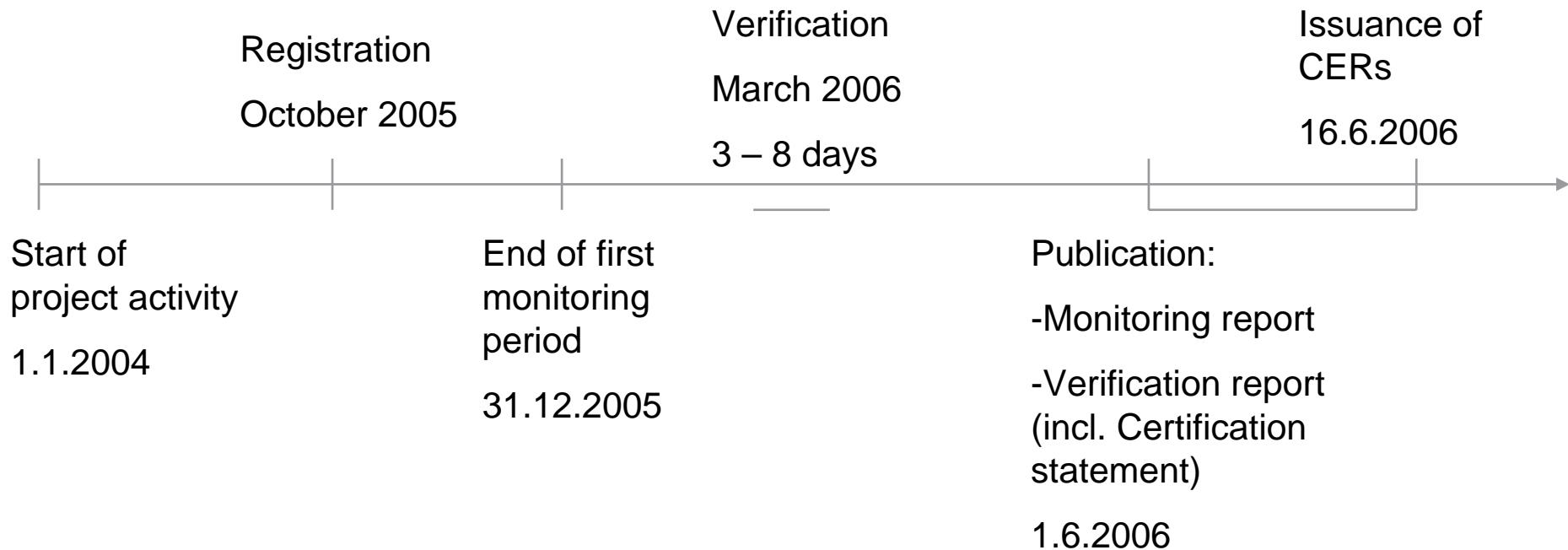
Key pitfalls – Frequency more than 20%

Delay more than 1 week	Delay more than 1 month
<ul style="list-style-type: none">• Lack of logic and consistency in PDD• Deviations from selected calculation methodology not justified sufficiently or incorrect formulas applied• Compliance with local legal requirements not covered sufficiently• Insufficient information on the stakeholder consultation process	<ul style="list-style-type: none">• Evidence of EIA and/or required construction/operating permits/approvals not provided• Letter of Approval insufficient or delayed

- Development of the guidebook:
 - process and methodology
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communication communication communication
- Monitoring pitfalls: Verification experiences
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The MRV Process According to the Marrakech Accords



VERIFICATION FINDINGS

- 1 Consistency with monitoring methodology
- 2 Factors used for project emission reduction calculations
- 3 Remaining Issues, CARs, FARs from Previous Validation or Verification
- 4 Completeness of Monitoring
- 5 Accuracy of Emission Reduction Calculations
- 6 Management System and Quality Assurance

CERTIFICATION STATEMENT

Table 1 Data Management Systems

Expectations	Score	Comments
Defined organisational structure, responsibilities and competencies		Insufficient internal review procedures
Conformance with monitoring plan		Insufficient evidence of conformity
Application of GHG determination methods	✓	
Identification and maintenance of key process parameters		Insufficient training
GHG Calculations		Errors in data transfer

Table 2 Detailed Audit Testing of Risk Areas and Random Testing

Areas of residual risk	Additional verification testing performed	Conclusions and FARs
Manual data transfer	Check monitoring procedures	
Accuracy of Measurement Instruments	Check calibration records	
Calculations	Re-calculate	
Emergency handling	Check procedures and calculations	

Content

- Development of the guidebook:
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- **Next steps: Elements of an update of the pitfalls book**

Elements of an update of the pitfalls book

- Verification
- Assessment of reasons for deviation requests and requests for review
- Experiences from Programmatic CDM projects (whenever that comes...)
- Pitfalls for each methodology:
 - CO₂ coefficient calculations for electricity baselines
 - Relevant legislative requirements and E+/E-
 - Additionality assessment
 - Minimum requirements with regards to accuracy, transparency, conservativeness
 - Sources of information for each country

Thank you!

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DNV Verification. So you can be sure.

Climate Change Services

**Best Verification /
Certification Agency
GHG Emission, Global**

Environmental Finance,
December 2004 - January 2005

**Best verifier, CDM & JI
projects**

Best verifier, EUETS

Environmental Finance,
December 2005-January 2006