

## Complement to Sampling

CEN/TC 351 – Construction products – Assessment of release of dangerous substances  
Workshop 19 June 2012 - Brussels

### Why a Complement to Sampling?

- Sampling of the product as it is to be used to perform a test:
  - Availability (emission or release)
  - Content
- Determination of RDS - specific prerequisites:
  - (Very) low concentrations
  - Statistically based approach (partly when feasible)
    - > Representative sample for a specific quantity of product
      - For what quantity?
      - > Consequences for the sampling approach
  - Variability will often be different from 'traditional' characteristics
  - Comply to test prerequisites (e.g. new surface)
  - Quantity sufficient to perform necessary tests

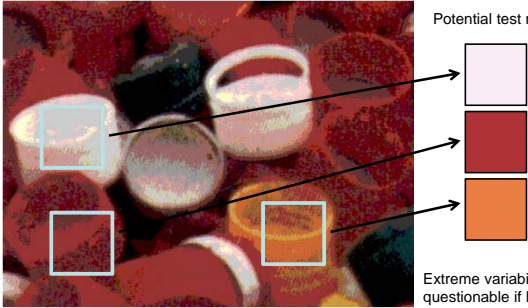
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### Variability and scale

- Representativeness, uncertainty and variability
- The scale at which you are looking determines what you will find
- By choosing the scale the result can be influenced
  - Take account of the variability
    - > Larger scale: less variability
  - Take account of the consequences of non-compliance
    - > Balancing costs for testing with (financial) consequences of rejecting a batch
  - Take account of the typically applied quantity
- Defining the scale of the assessment is essential
- The scale should be set for a product group
  - Level playing field for that product

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### A simple example 1




Potential test results

Extreme variability; questionable if batches belong to same product

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### A simple example 2

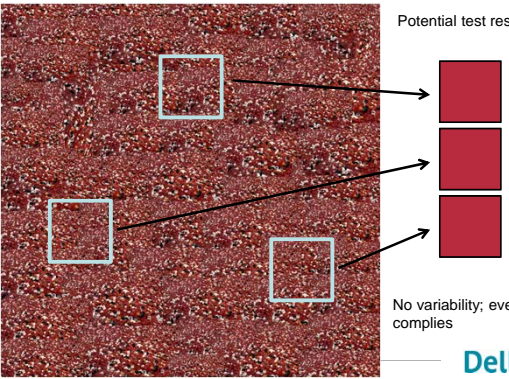


Potential test results

Some variability; specific batches might be rejected

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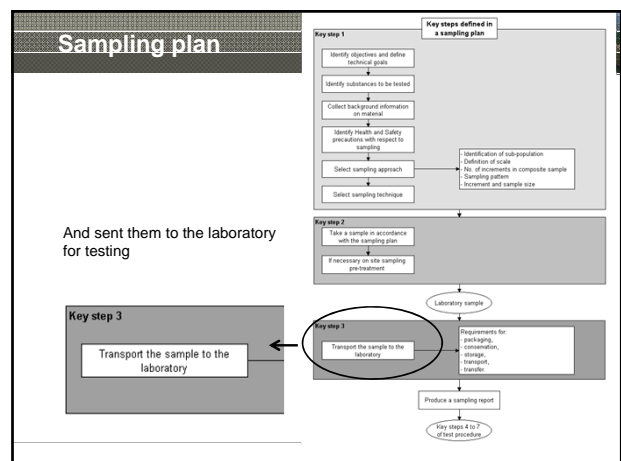
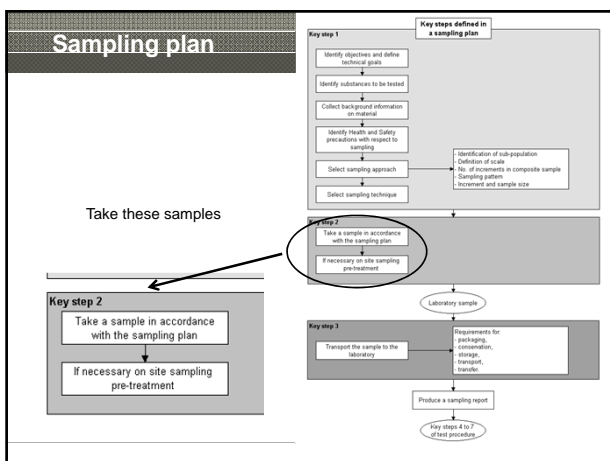
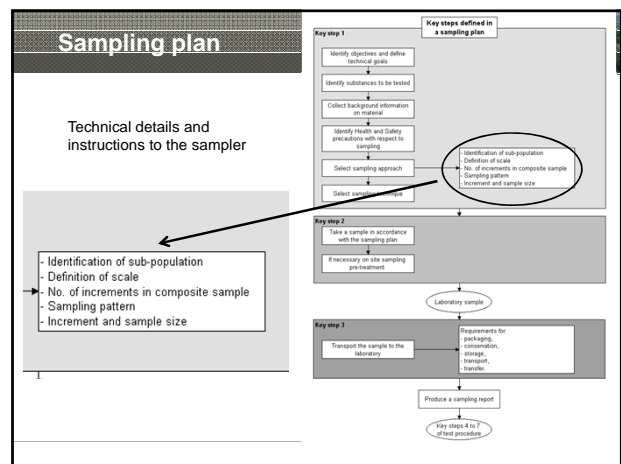
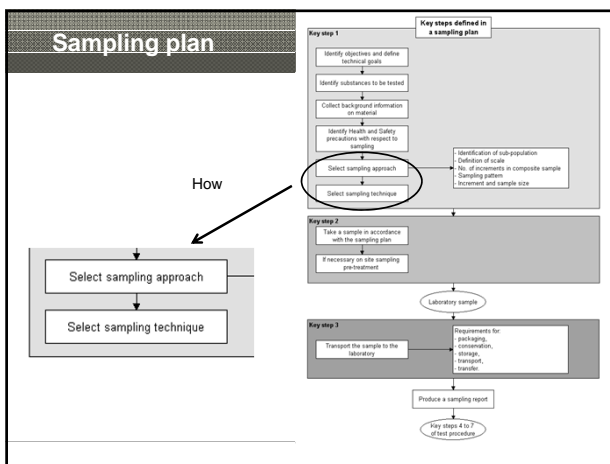
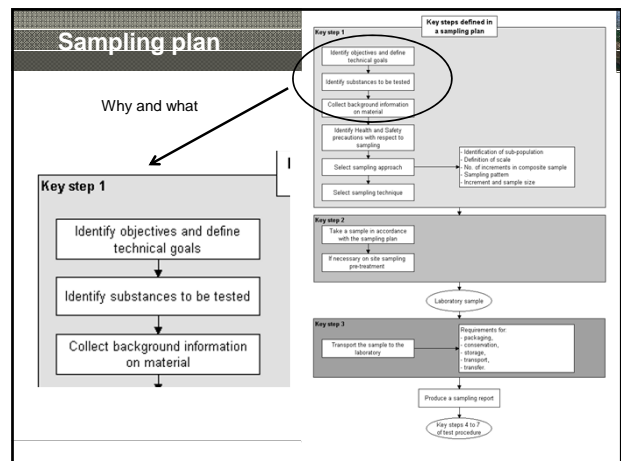
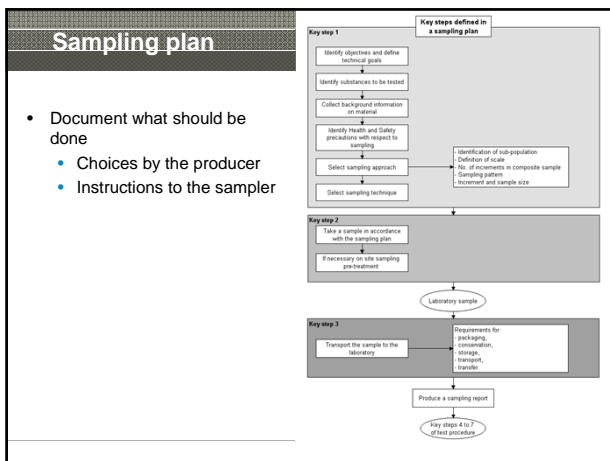
### A simple example 3



Potential test results

No variability; every batch complies

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### Sampling strategy

- Various concepts
- In Complement to Sampling:
  - Focus on taking one sample
    - > A series of samples relates to a test procedure and is not addressed
  - Obtaining a representative sample for the chosen scale
    - > Granular products
    - > Small shaped products
    - > Large shaped products
    - > Composite products
    - > Not finalized products

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### Checklist for product TCs

- Compare sampling in product standard with Complement to Sampling
  - Vital items are to be addressed
  - On those topics informed decisions should be made
- Addressed should be
  - Objective
  - Sampling plan
  - Sampling approach
  - Definition of sub-population
  - Identification of scale
  - Incremental sampling or single samples
  - Size of increments or samples
  - Number of increments in a composite sample
  - Sampling technique
  - On-site subsampling (if relevant)
  - Packaging, preservation, storage, transport
  - Report of sampling
  - Chain of custody report

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Thanks for your attention!

Frank Lamé  
 Deltares  
 P.O. Box 85467  
 3508 AL Utrecht  
[frank.lame@deltares.nl](mailto:frank.lame@deltares.nl)

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