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ESBN and Eionet, strengthening the links

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EIONET Workshop on Soil, Brussels, 18 – 9 - 2007

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Soil Degradation

- Land management not in balance with soil, terrain and climate conditions
- Damage develops when passing thresholds
- Processes: both slow and fast (incidents)

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Factors

- Land management
  - Intensification/extensification
  - Globalisation
  - Intensive agriculture: often large investments needed
- Soils
  - Each soil type has his own characteristics for resilience against disturbances and has his own environmental/agricultural properties
- Terrain
  - Often difficult to change (land levelling)
- Climate
  - Climate change: more extreme weather conditions – in many places resulting in more limitations for land management

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Conclusion factors

- The present challenges around land management makes it necessary to see soil data in another perspective.
- Soil data will be needed by new groups of users having new requirements

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Pillars Soil Communication/Soil Directive

- Legislation
- Integration with other EU policies/directives
- Research
- Public Awareness

- Which soil data are available and what is the need for soil information in future?

European Soil Bureau Network (ESBN)

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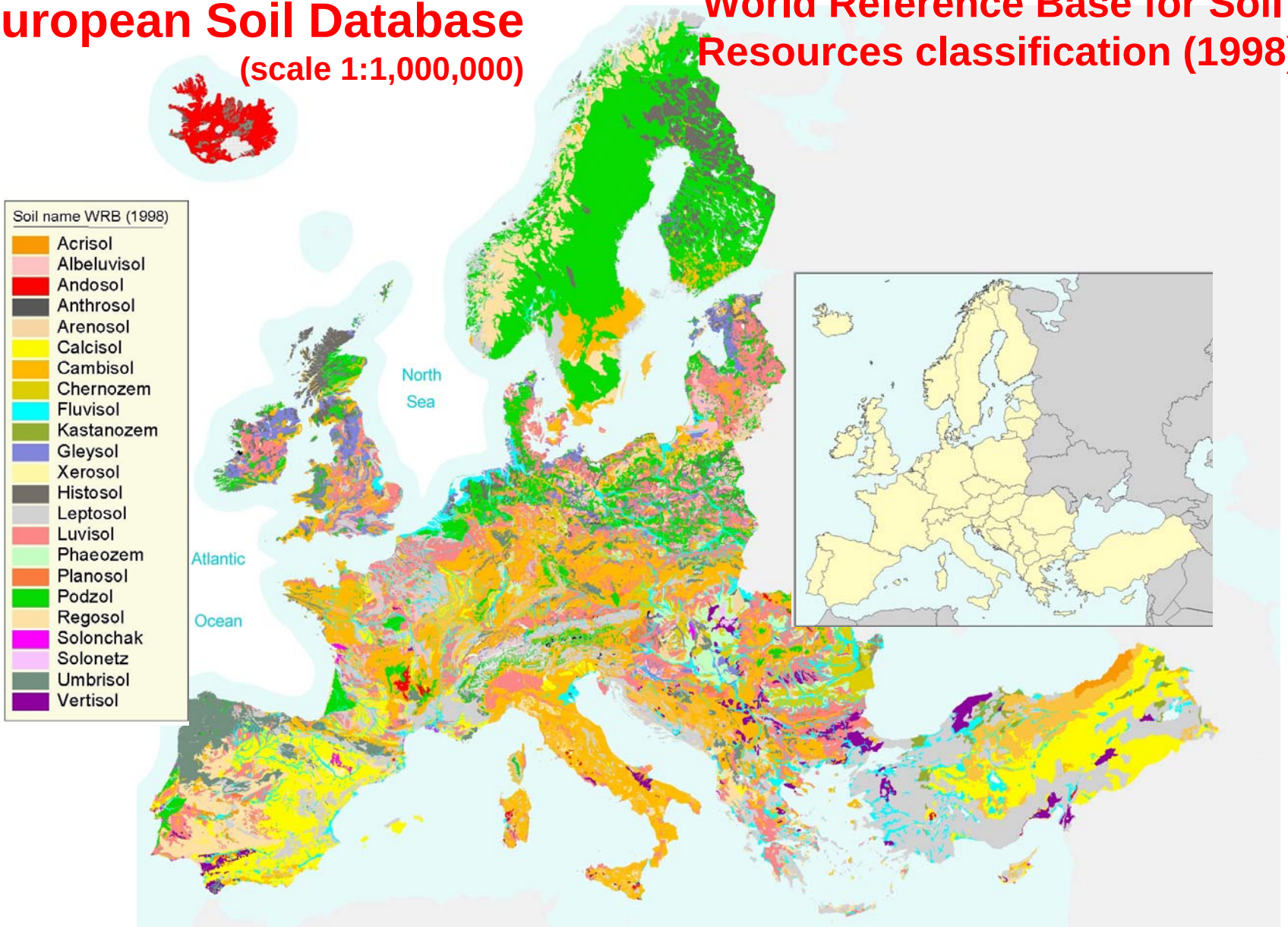
- Established in 1996 as a network of national soil science institutions. Covers at this moment all European countries. Members from Universities and Research institutes.
- Characteristic: members own national soil data bases, mainly pedological (soil types). Owner European Soil Data Base
- Generally members don't own information about contaminated sites.
- ESBN connected to European Soil Bureau at JRC.
- Task European Soil Bureau: collect, harmonise, organise and distribute soil information for Europe: European Soil Data Base.

European Soil Database

(scale 1:1,000,000)

World Reference Base for Soil Resources classification (1998)



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European Soil Data Base

- Scale 1 : 1.000.000 vector and raster data
- Database free available via JRC: http://eusoils.jrc.it/data.html
- For 5 pilot areas 1 : 250.000 soil maps are/will be available. Vision: in future the whole of Europe will be covered by soil maps 1 : 250.000

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Role ESBN

- Deliverance soil data and improving data quality
- Advising EU and JRC
  - TWG's Soil Communication
  - Soil Directive: common criteria for identification of areas at risk (erosion, organic matter, compaction, salinisation and landslides)
- Research: via calls Frame Work Programs (Pesera, Scape, Envasso etc).
- Challenges:
  - Further data improvement
  - Take in use relevant models
  - Implementation Digital Soil (Functional) Mapping
  - Integration soil data with other data sources (land cover, water quality etc)

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Links with EIONET

- Need for soil data is changing and developing fast, both at European, national and regional level.
- Need:
  - Soil maps and statistics
  - Derived thematic information (both geographical and statistics).
- To be expected:
  - Need for information about topics not yet covered
  - Need for implementation new technology

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Strengthening links

- Which needs has EIONET in the (near) future placed in the light of the present developments?
- Which needs can easily be fulfilled?
- Which needs need extra action: research – development models etc.

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Conclusions

- ESBN is user oriented. EIONET is seen as a clear user.
- EIONET – ESBN: defining in mutual consultation future needs.
- Finding, eventually in cooperation with other actors, solutions for the needs difficult to be covered.