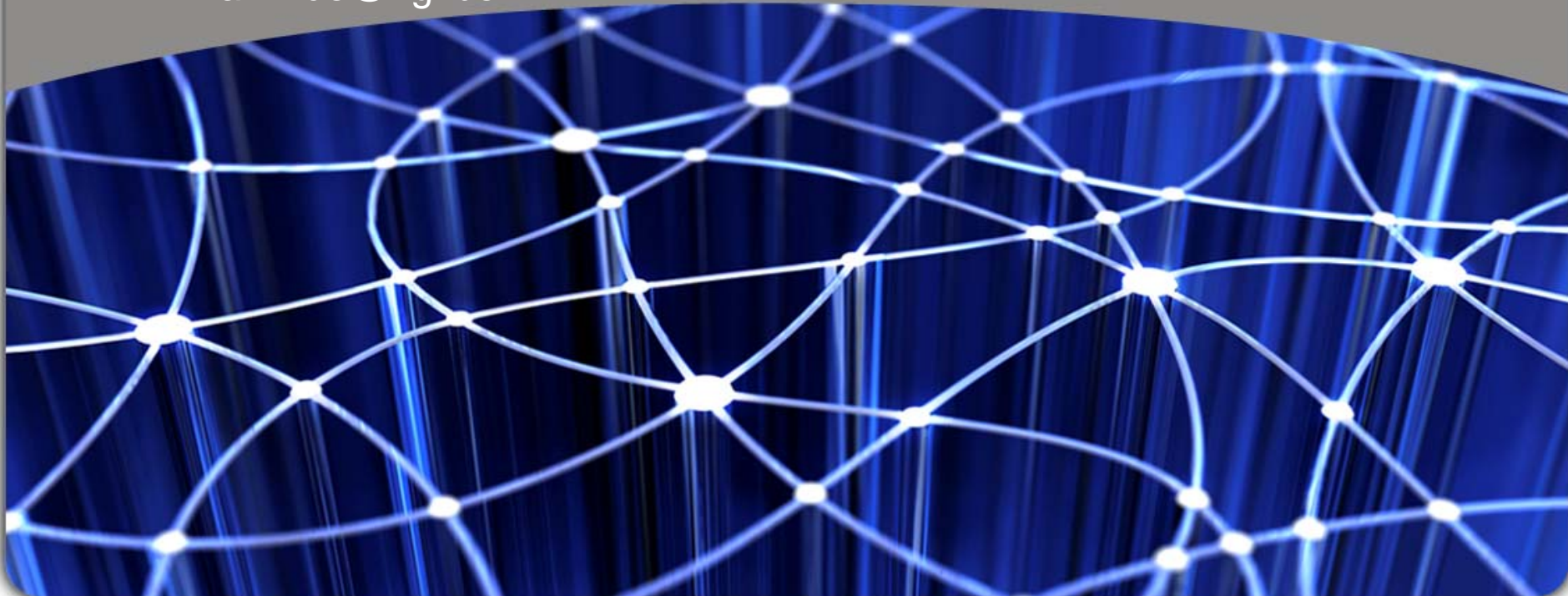
A white five-pointed star with a white beam of light pointing towards it from the top left corner.

How to maintain cross border data consistency at state boundaries – A study based on data owned by the National Mapping and Cadastral Agencies

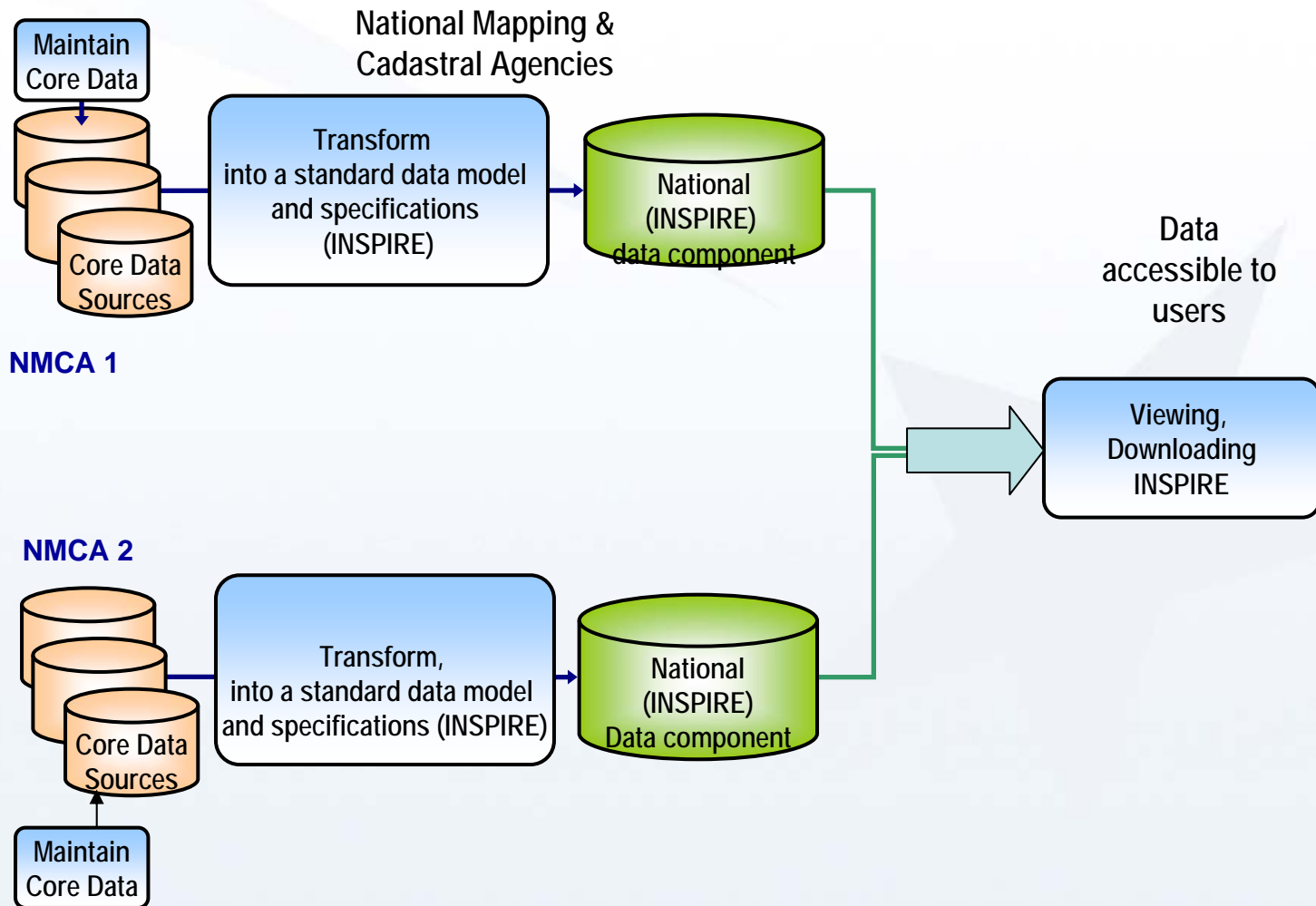
Nathalie Delattre
National Geographic Institute of Belgium
Email: nde@ngi.be



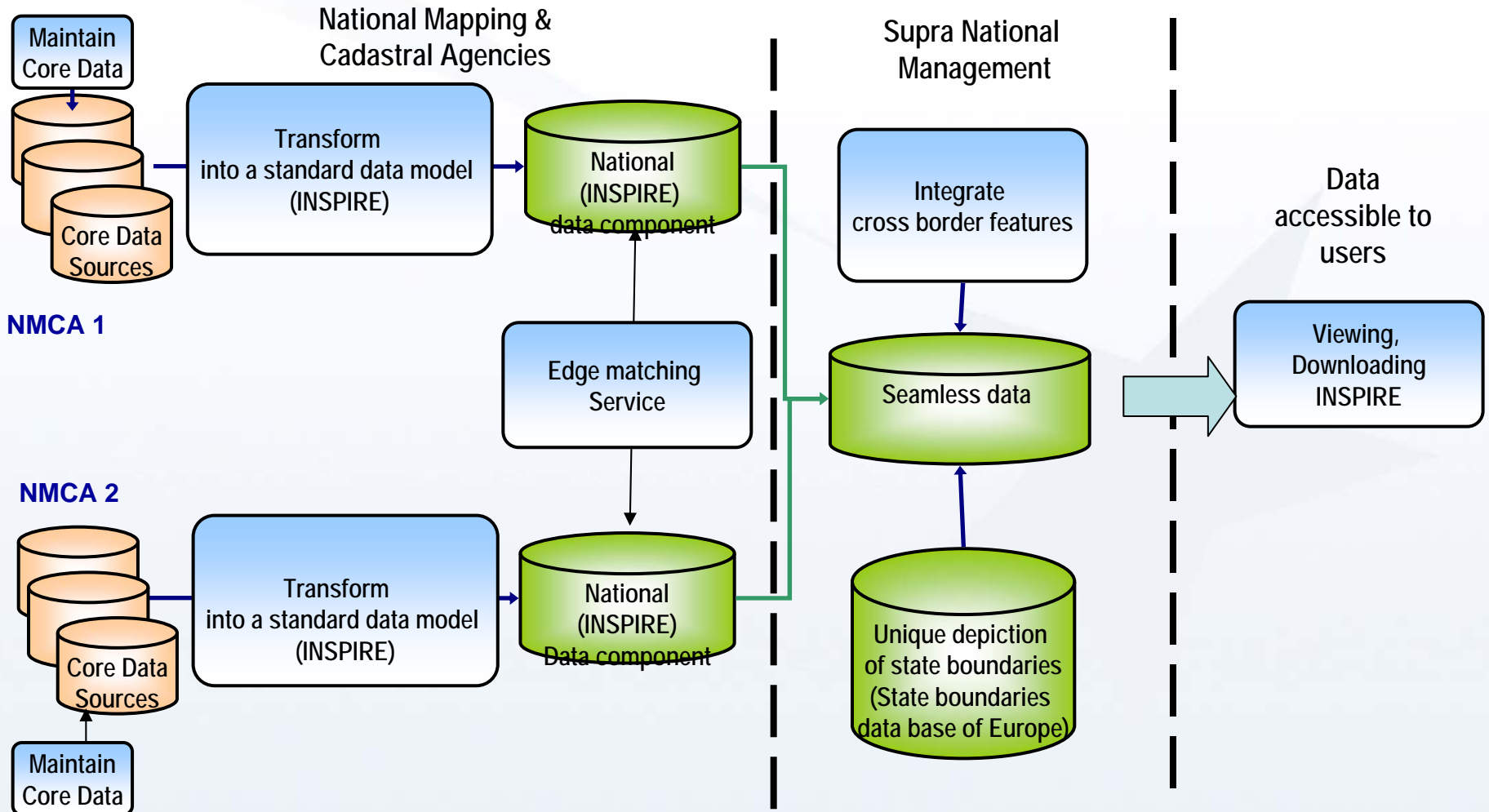
Data edge-matching solutions and methodology : Organisational aspects

- refers to the Article 10(2) of the INSPIRE Directive
- insure data **edge matching results of good quality**
- **maintain** cross border data **through repeating updating.**

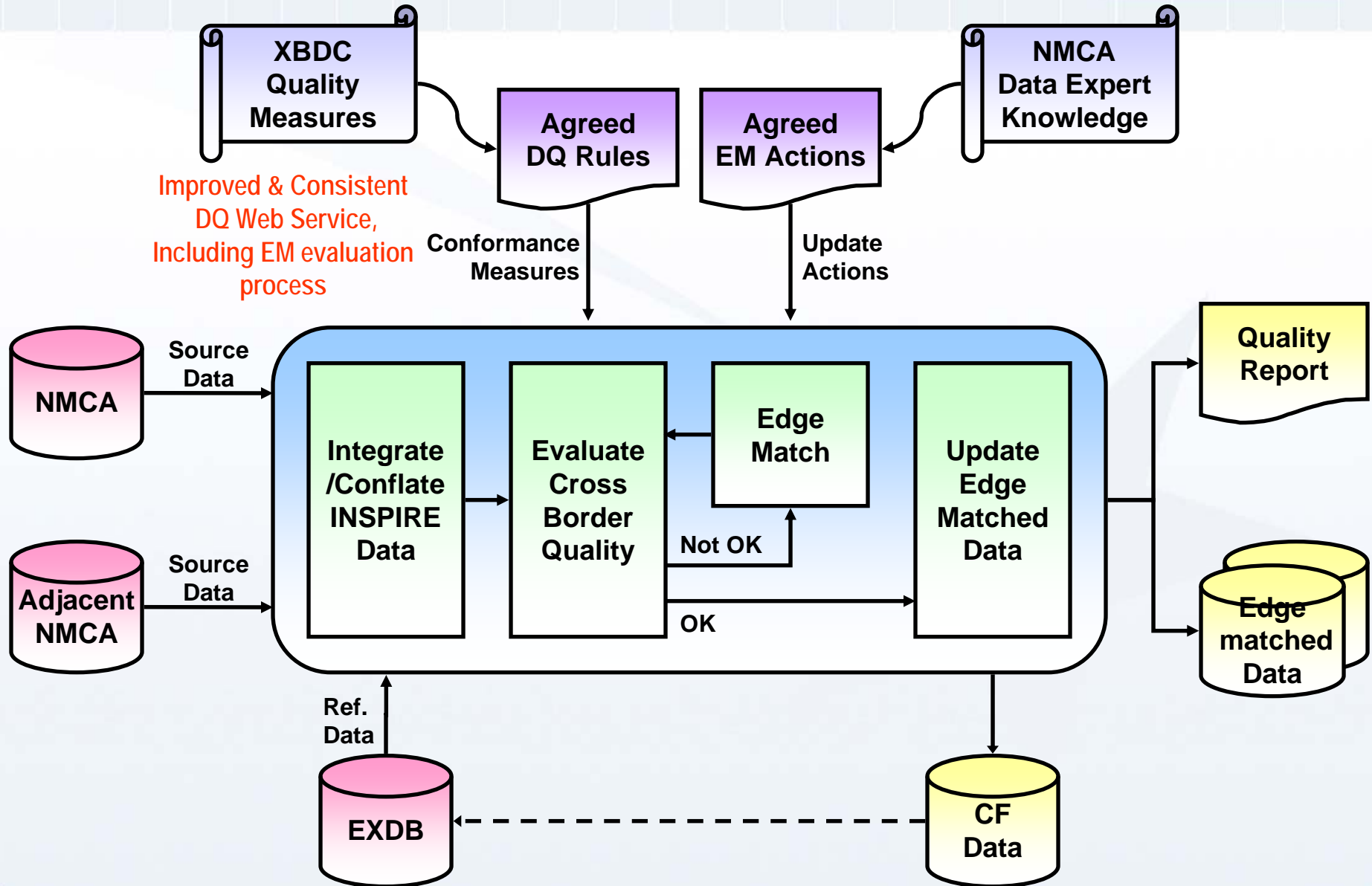
INSPIRE Data Supply Chain



Cross border INSPIRE data supply Chain

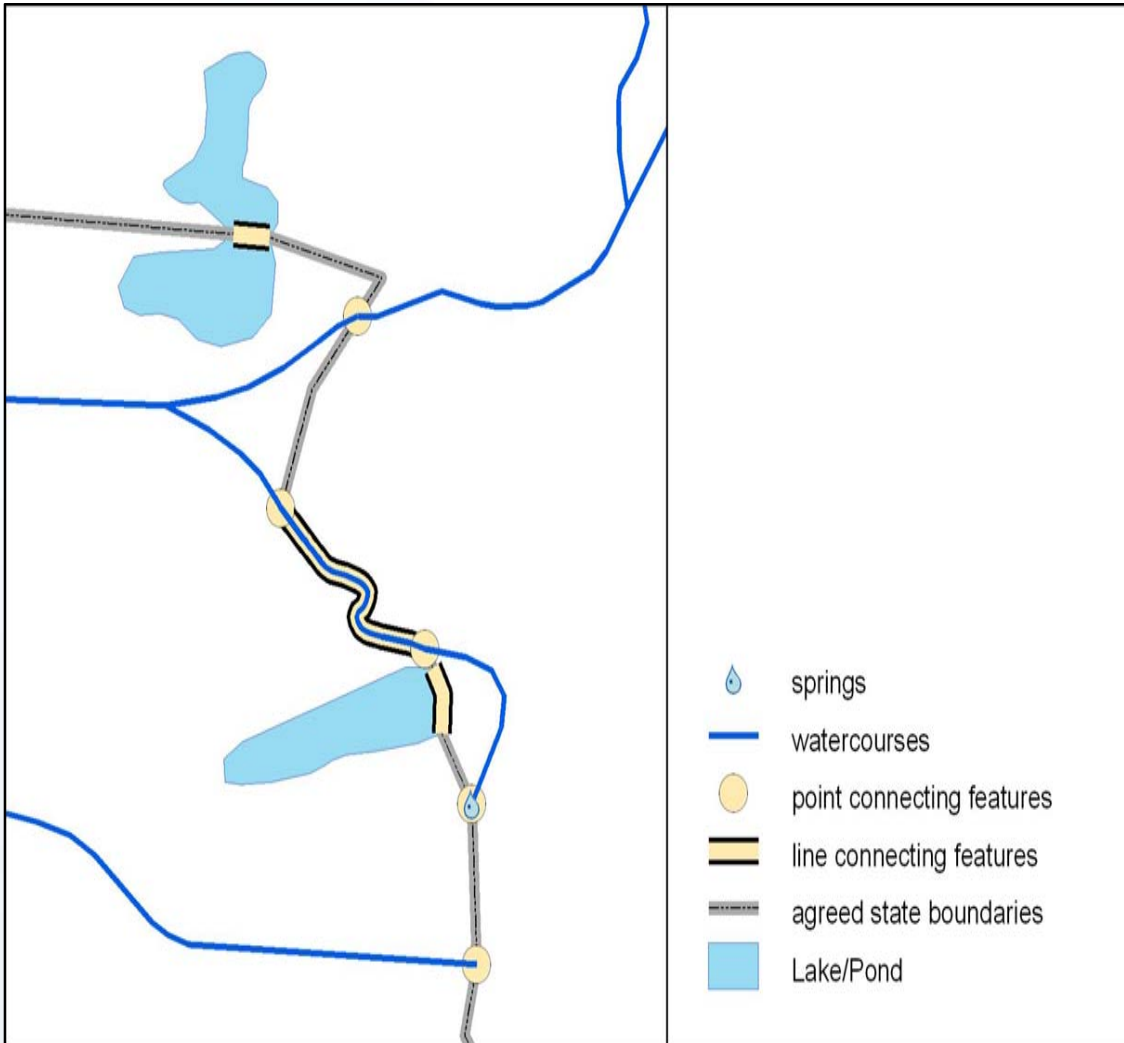


Quality Controlled Edge Matching Process



Euro Cross-boundary Database (EXDB)

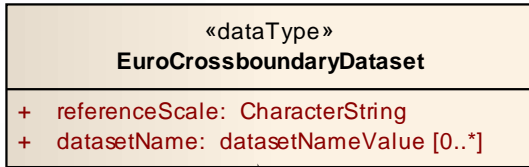
The database storing EM information



1. **Agreed depiction of State Boundaries** (centrally managed) , serve as reference to national ones.
2. **Connecting features** storing edge matching information (point/line features)

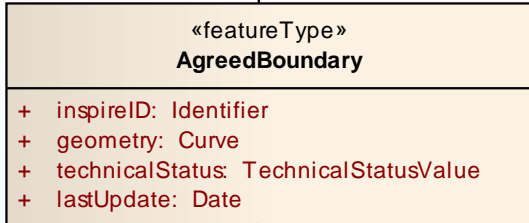
EXDB Data Model

class EuroCrossboundaryDatabase



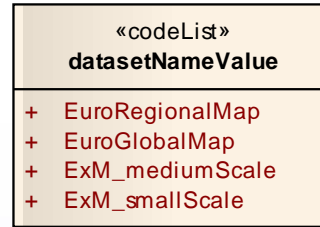
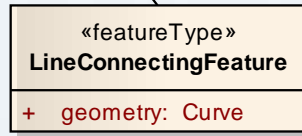
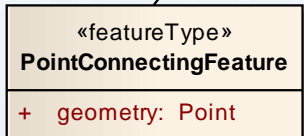
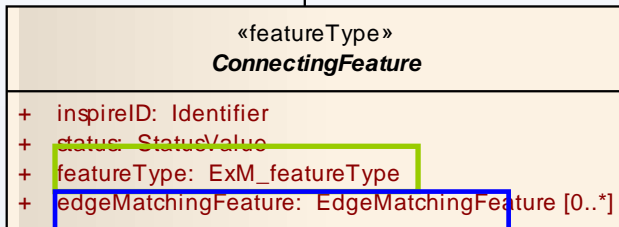
+dataset 1

+boundary 0..*

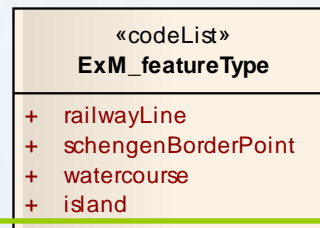
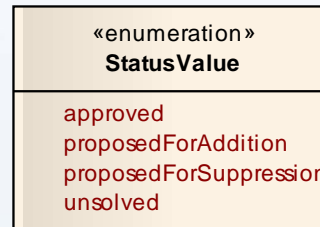
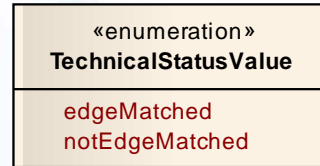


+boundary 1 *

+CF 0..*



Has to be revised according to ExM specification and specifications of future pan-European data products.



Has to be expanded according to ExM specification.

Euro Cross-boundary Database

Dataset
Treaty level
(2.5D)

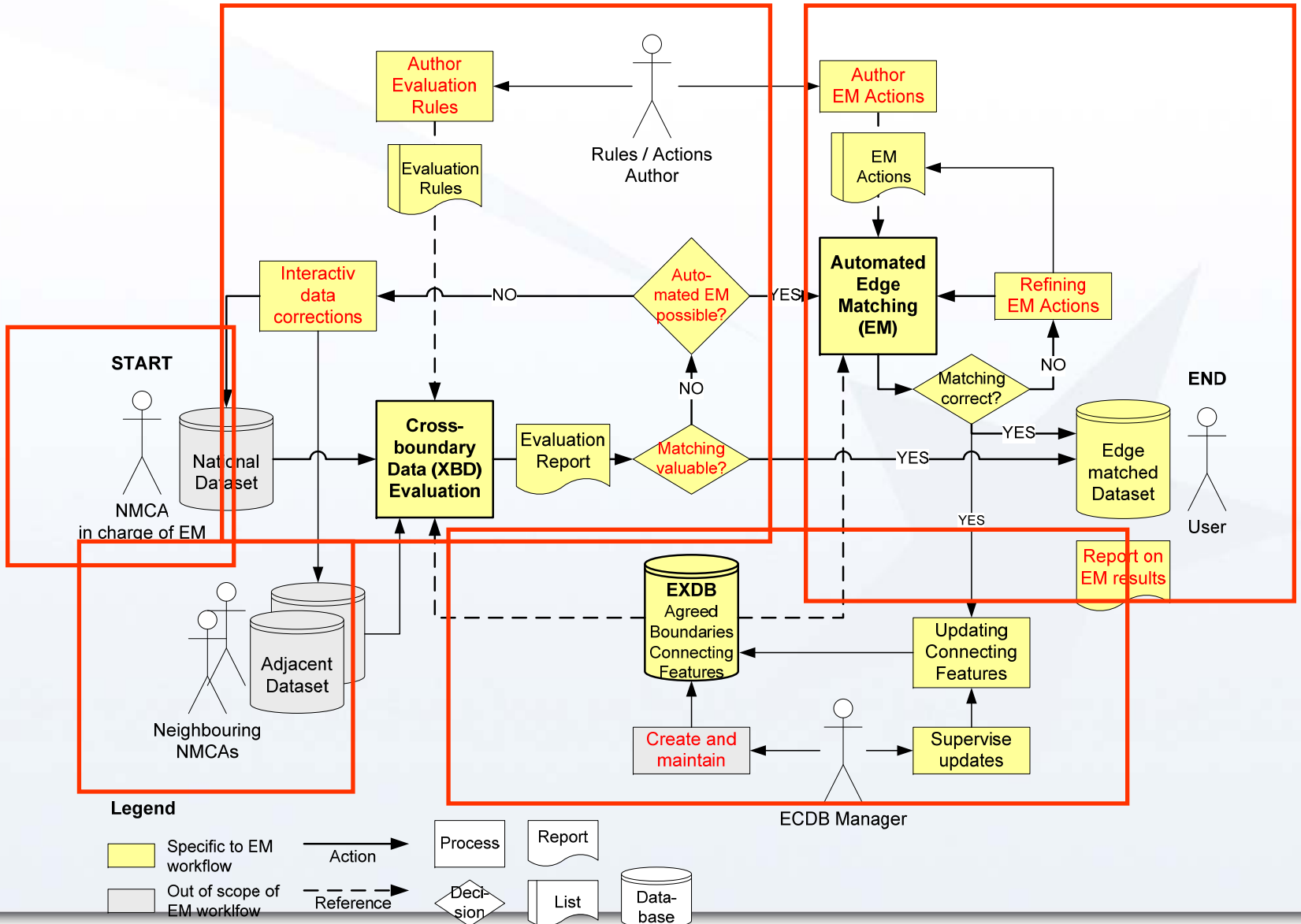
Dataset
large scale 1
(2.5D)

Dataset
large scale 2
(2D)

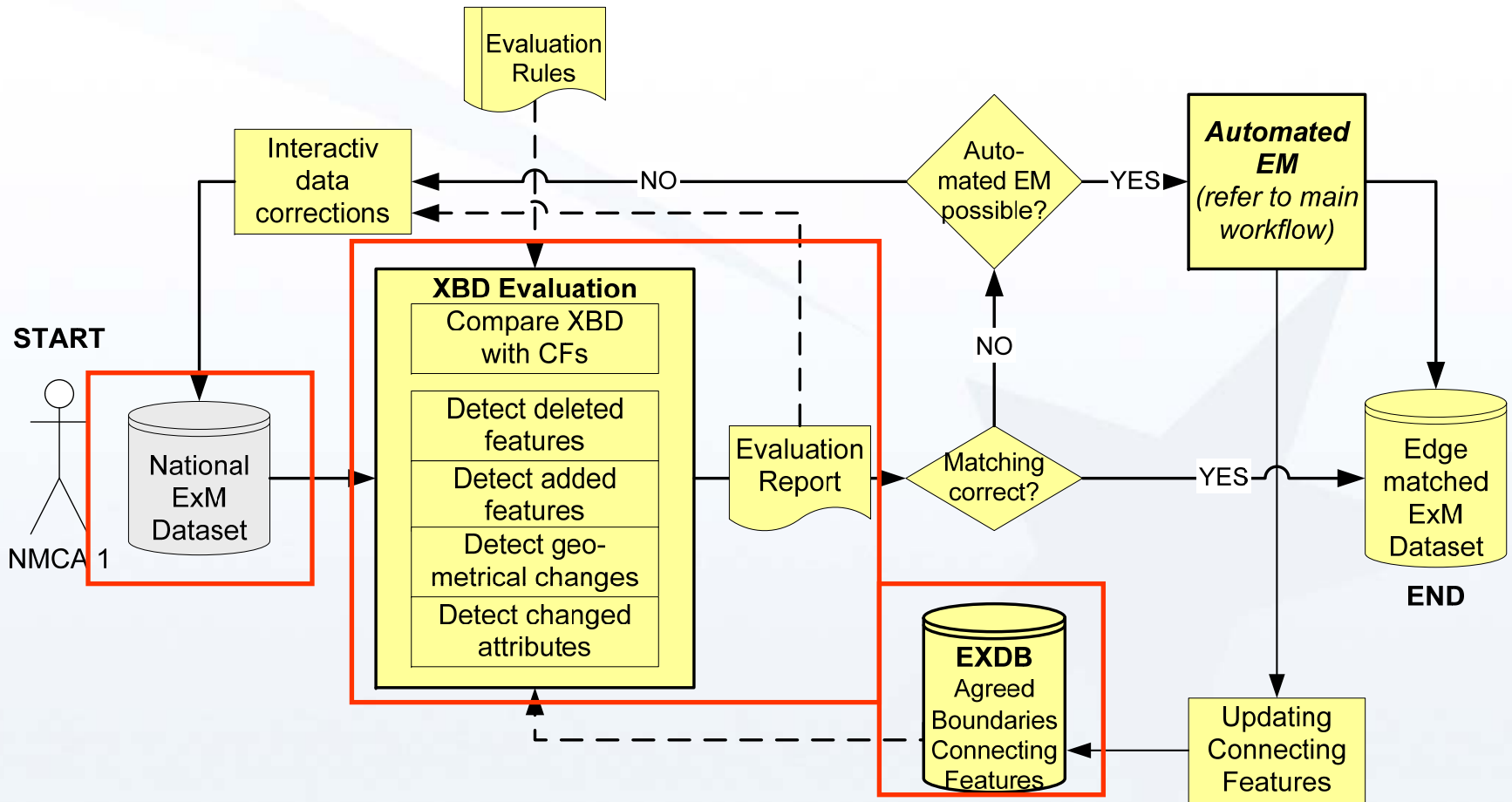
Dataset
medium scale
(2D)

Dataset
small scale
(2D)

User/Producer Controlled Edge Matching Process



Using EXDB as ref data for EM of datasets



- Quality Controlled EM workflow (Evaluation rules, EM rules)
- User/Producer Controlled EM workflow (decide of acceptable data for EM, decide of evaluation rules and EM rules)
- Web EM service (fully automated)
- Based on agreed state boundaries and connecting features for sustainable EM process



Jürgen
BKG Germany



Kerstin
NLS Sweden



Andreas
BEV Austria



Nathalie
IGN Belgium



Matt
1Spatial UK

Thank you for your interest

The team



Noémie
IGN France



Gabriela
ANCPI Romania



Luc
1Spatial UK



Marcus
BKG Germany



Esa
NLS Finland



Romain
IGN France