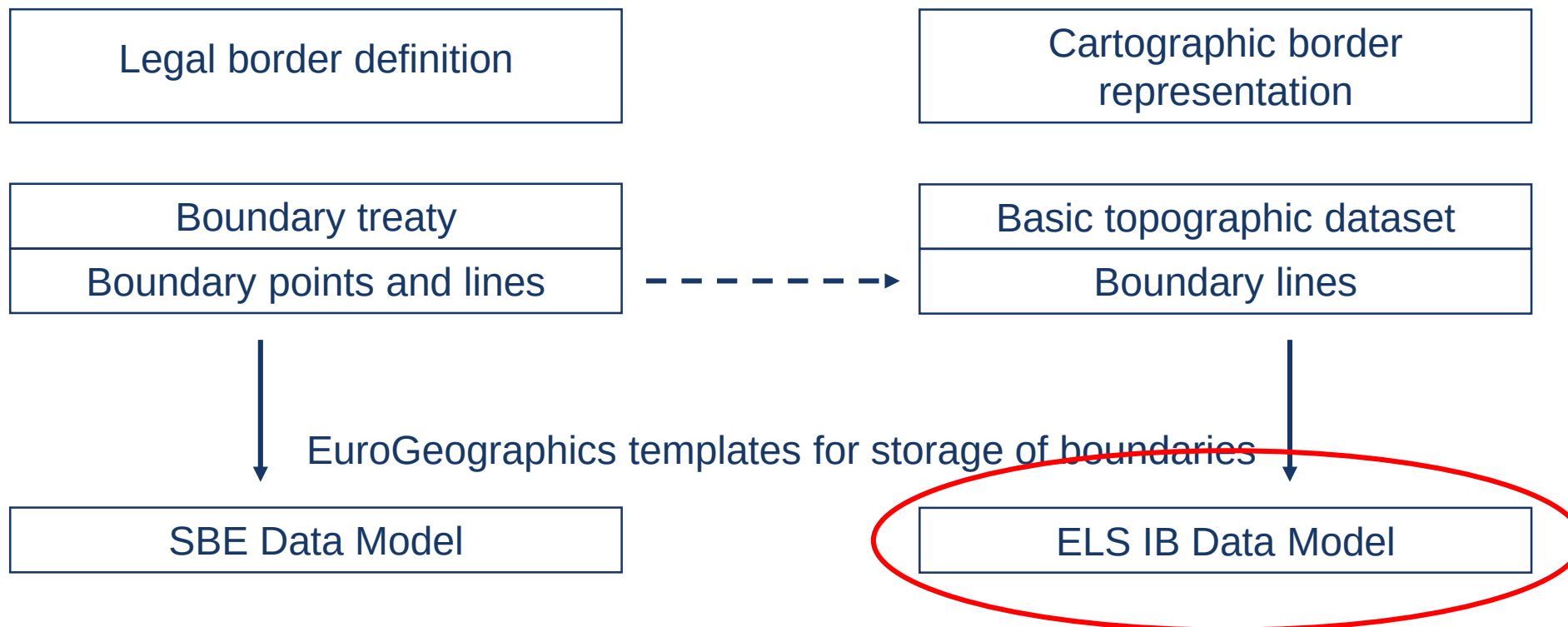


Data models for boundaries

Marcus Brühl / BKG
Webinar, 10.12.2018

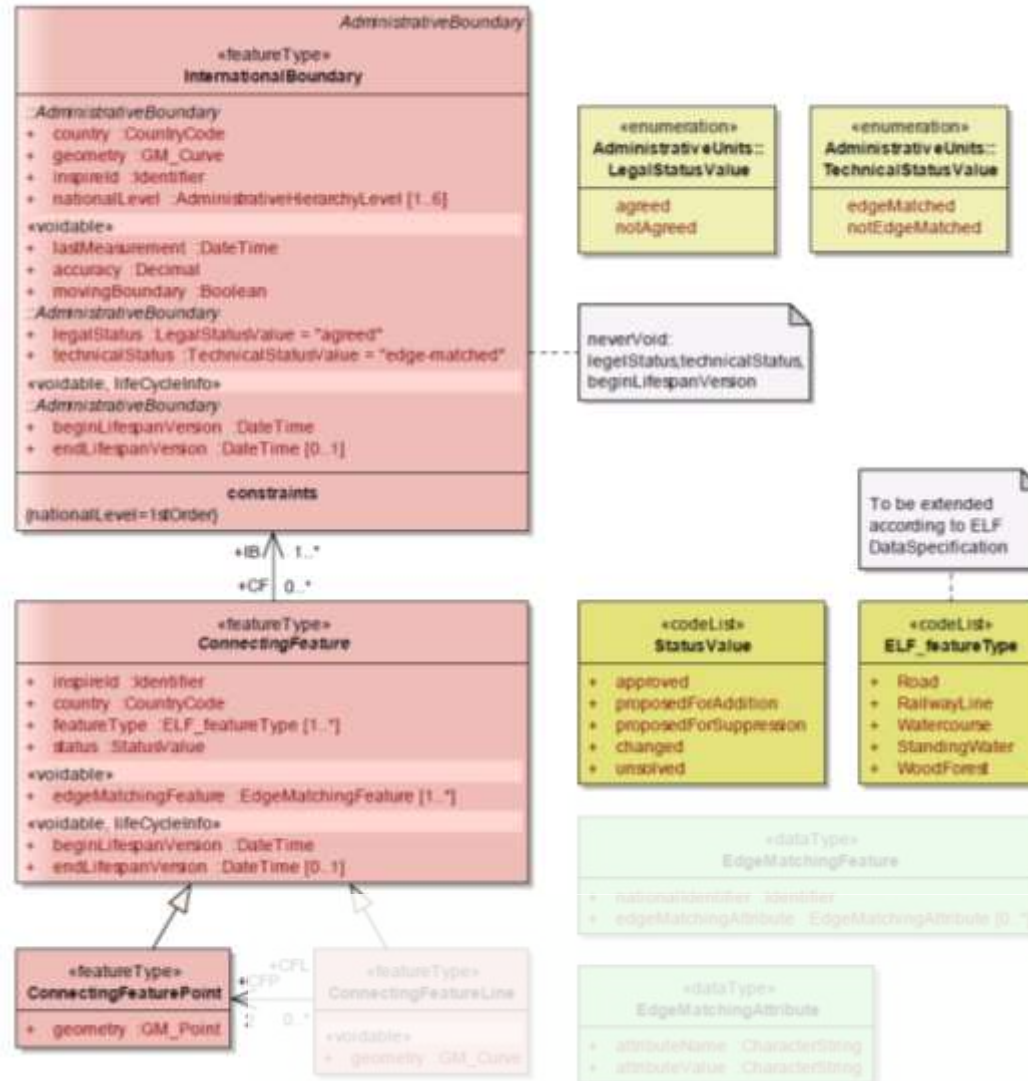




ELS IB Data Model

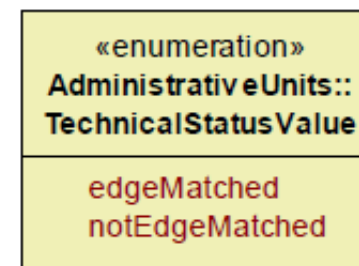
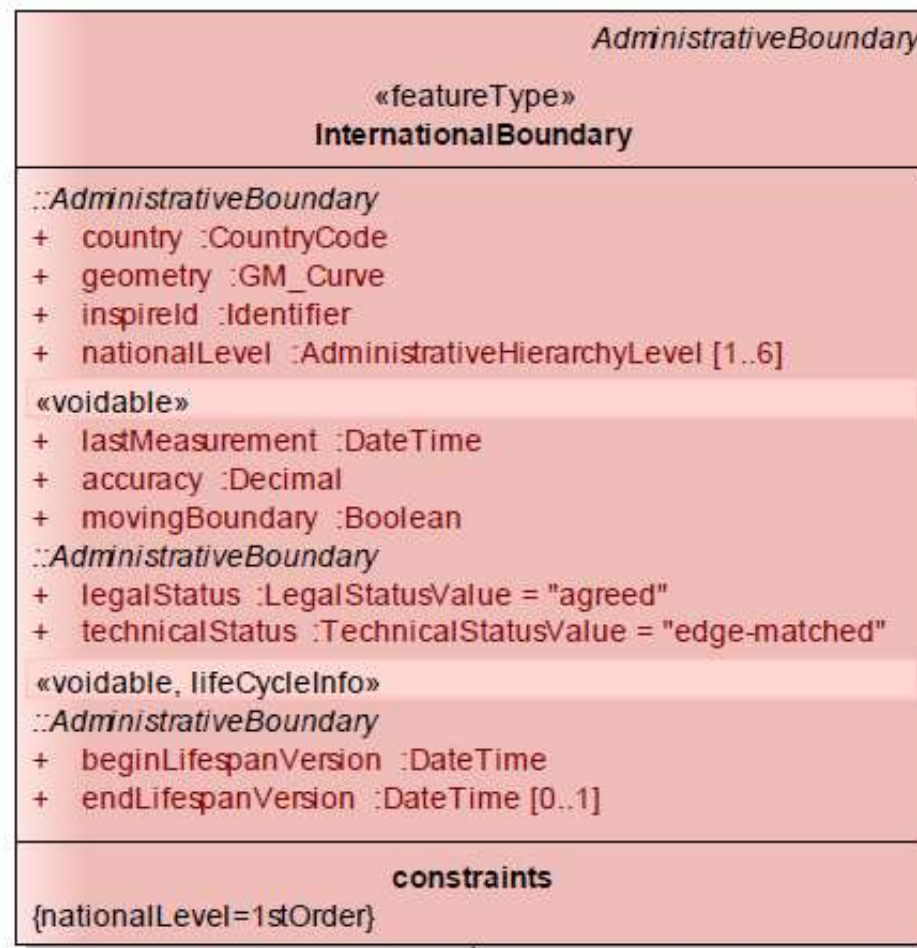
- „European Location Services International Boundary“
- Developed in ELF project
- Rather simple data model based on INSPIRE
- Supports the storage of the international boundaries and connecting features
- Supports the exchange of information between NMCAAs and with EuroGeographics

ELS IB content



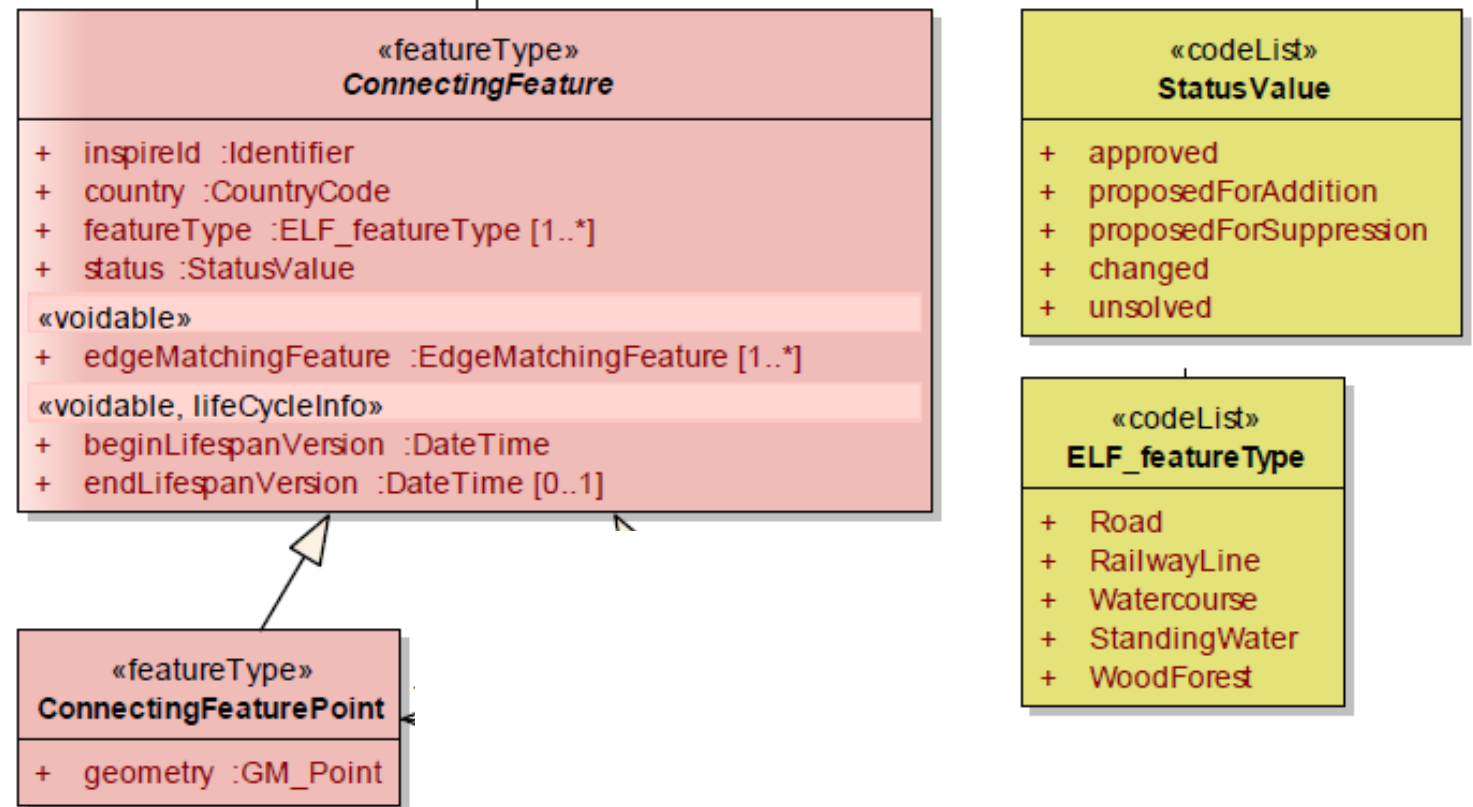
ELS IB content

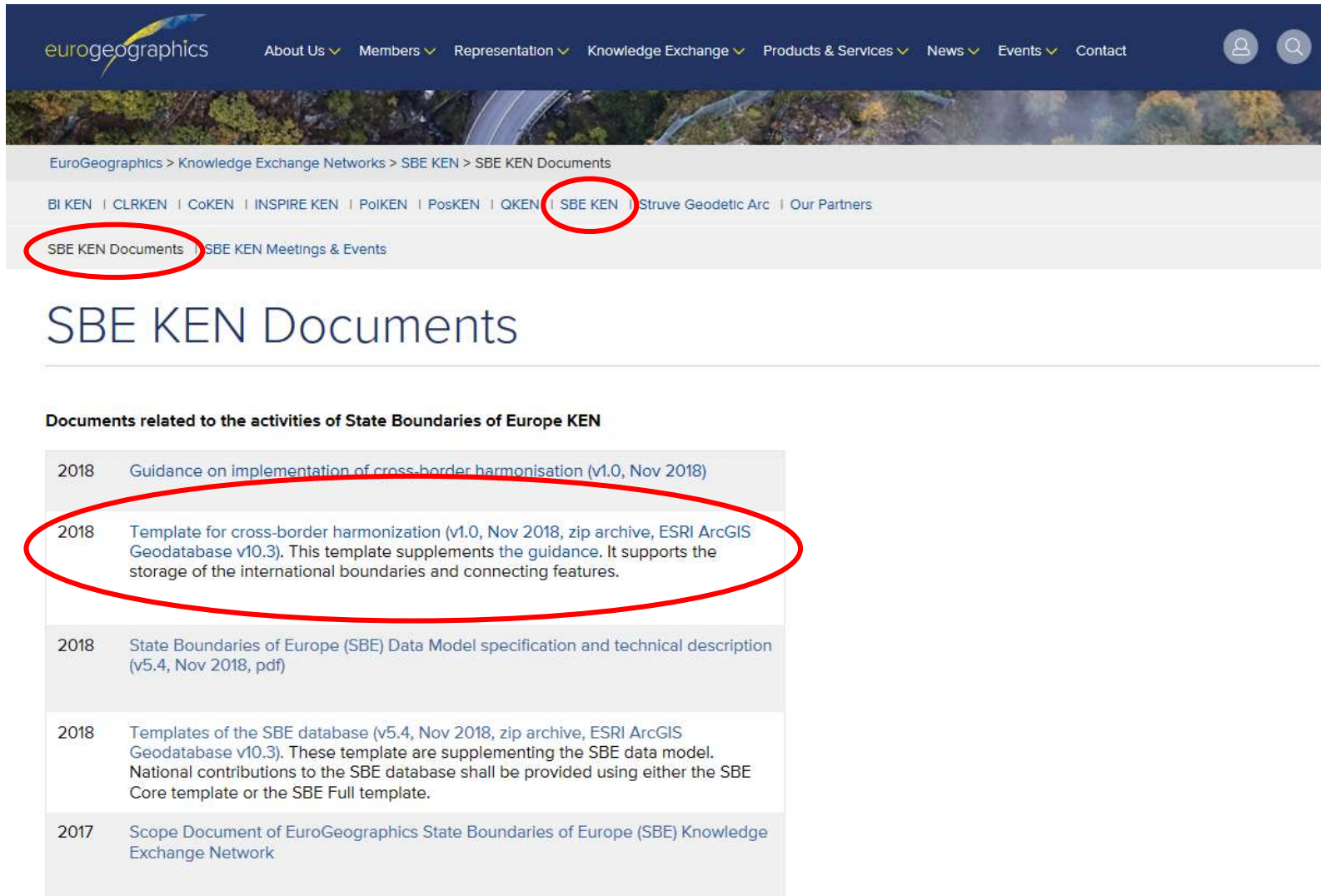
International Boundary



ELS IB content

Connecting Feature Point





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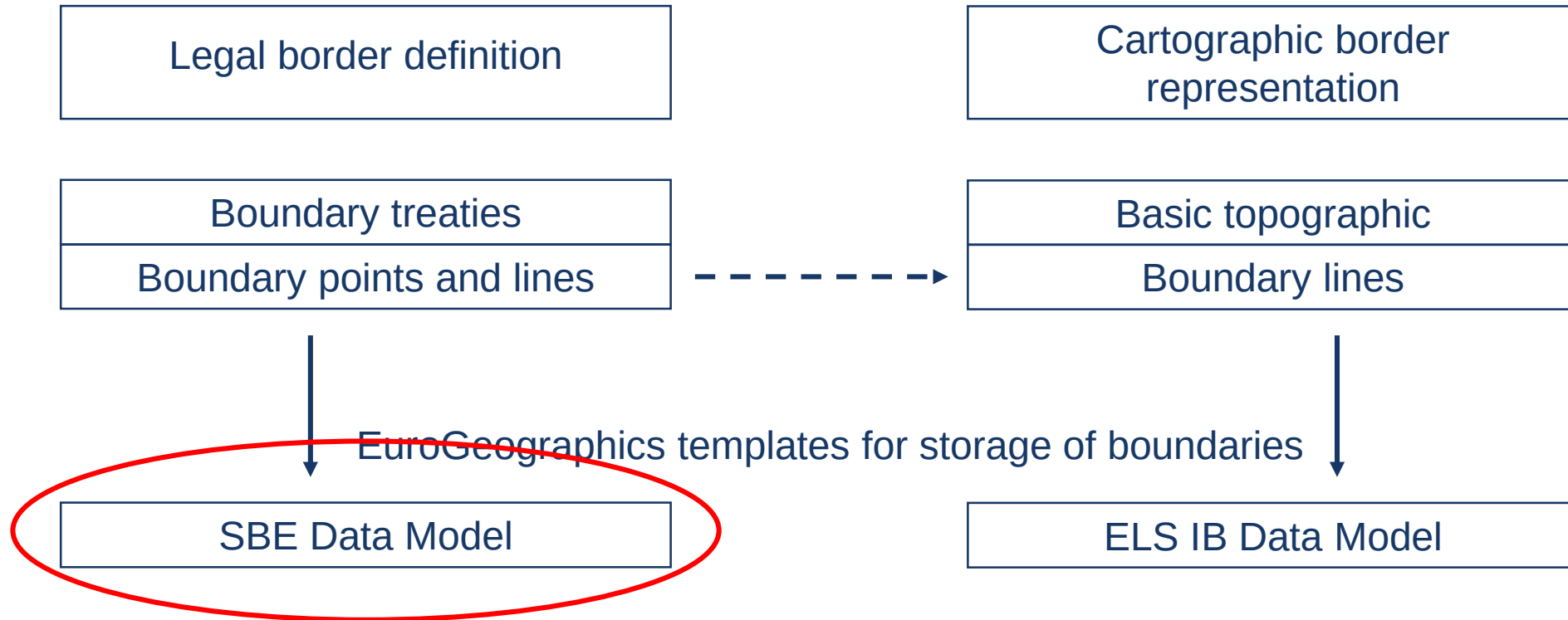
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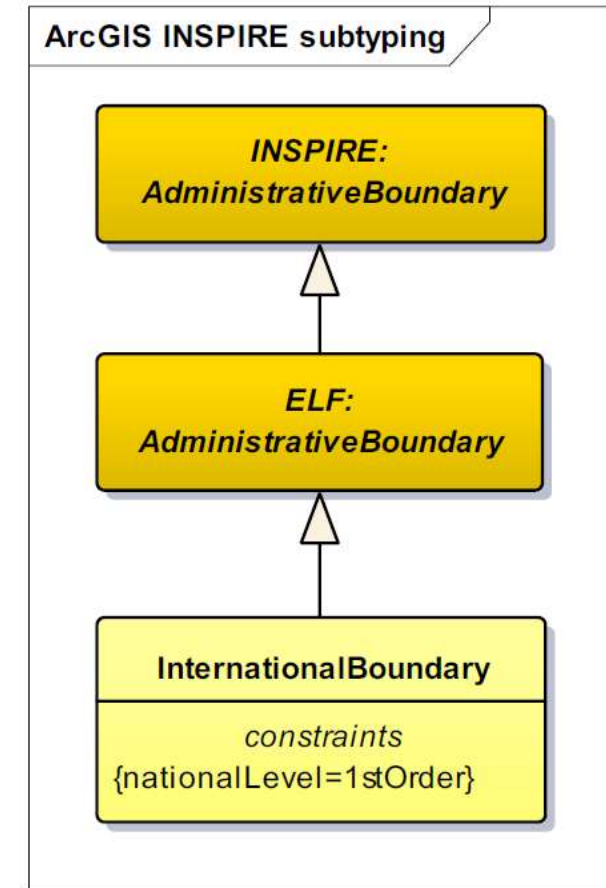
Documents related to the activities of State Boundaries of Europe KEN

2018	Guidance on implementation of cross-border harmonisation (v1.0, Nov 2018)
2018	Template for cross-border harmonization (v1.0, Nov 2018, zip archive, ESRI ArcGIS Geodatabase v10.3). This template supplements the guidance. It supports the storage of the international boundaries and connecting features.
2018	State Boundaries of Europe (SBE) Data Model specification and technical description (v5.4, Nov 2018, pdf)
2018	Templates of the SBE database (v5.4, Nov 2018, zip archive, ESRI ArcGIS Geodatabase v10.3). These template are supplementing the SBE data model. National contributions to the SBE database shall be provided using either the SBE Core template or the SBE Full template.
2017	Scope Document of EuroGeographics State Boundaries of Europe (SBE) Knowledge Exchange Network



SBE Data Model

- Complete new specification SBE v5.4 replacing the previous v4.13
- Based on INSPIRE
- Supports the storage of all information related to the legal definition of boundaries
- Two options:
 - SBE Core (essential elements of SBE)
 - SBE Full (additional elements and relations)



SBE Core

ArcGIS SBE Core

CountryContact

InternationalBoundary

ArcGIS SBE Core Detailed

«ObjectClass»
CountryContact

«Field»

- + identifier: esriFieldTypeString
- + country: CountryCode
- + organisation: esriFieldTypeString
- + pointOfContact: esriFieldTypeString
- + email: esriFieldTypeString

«ObjectClass»
CoordinateReferenceSystem

«Field»

- + identifier: esriFieldTypeString
- + epsg: esriFieldTypeSmallInteger
- + crs: esriFieldTypeString
- + frame: esriFieldTypeString
- + epoch: esriFieldTypeDate

«Polyline»
InternationalBoundary

«Field»

- + country: CountryCode
- + nationalLevel: AdministrativeHierarchyLevel = 1
- + legalStatus: LegalStatusValue = 1
- + technicalStatus: TechnicalStatusValue = 1
- + country1: CountryCode
- + country2: CountryCode
- + accuracy: esriFieldTypeDouble
- + movingBoundary: Boolean
- + lastMeasurement: esriFieldTypeDate
- + remark: esriFieldTypeString

..CoreInspire

- + inspireId: esriFieldTypeString
- + beginLifespanVersion: esriFieldTypeDate
- + endLifespanVersion: esriFieldTypeDate

constraints

{nationalLevel=1stOrder}

«Point»
BorderPoint

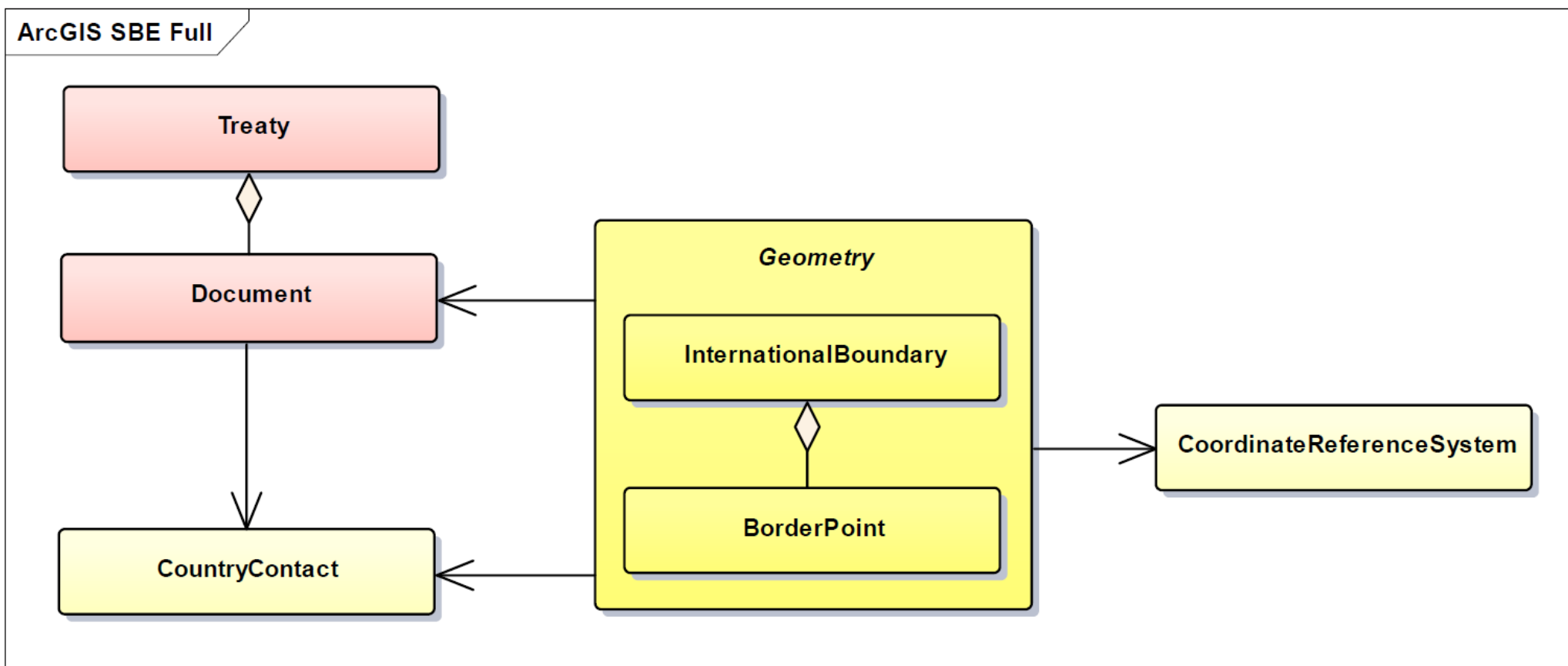
«Field»

- + country: CountryCode
- + legalStatus: LegalStatusValue = 1
- + technicalStatus: TechnicalStatusValue = 1
- + accuracy: esriFieldTypeDouble
- + height: esriFieldTypeDouble
- + heightAccuracy: esriFieldTypeDouble
- + materialized: Boolean
- + lateralPosition: Boolean
- + lastMeasurement: esriFieldTypeDate
- + remark: esriFieldTypeString

..CoreInspire

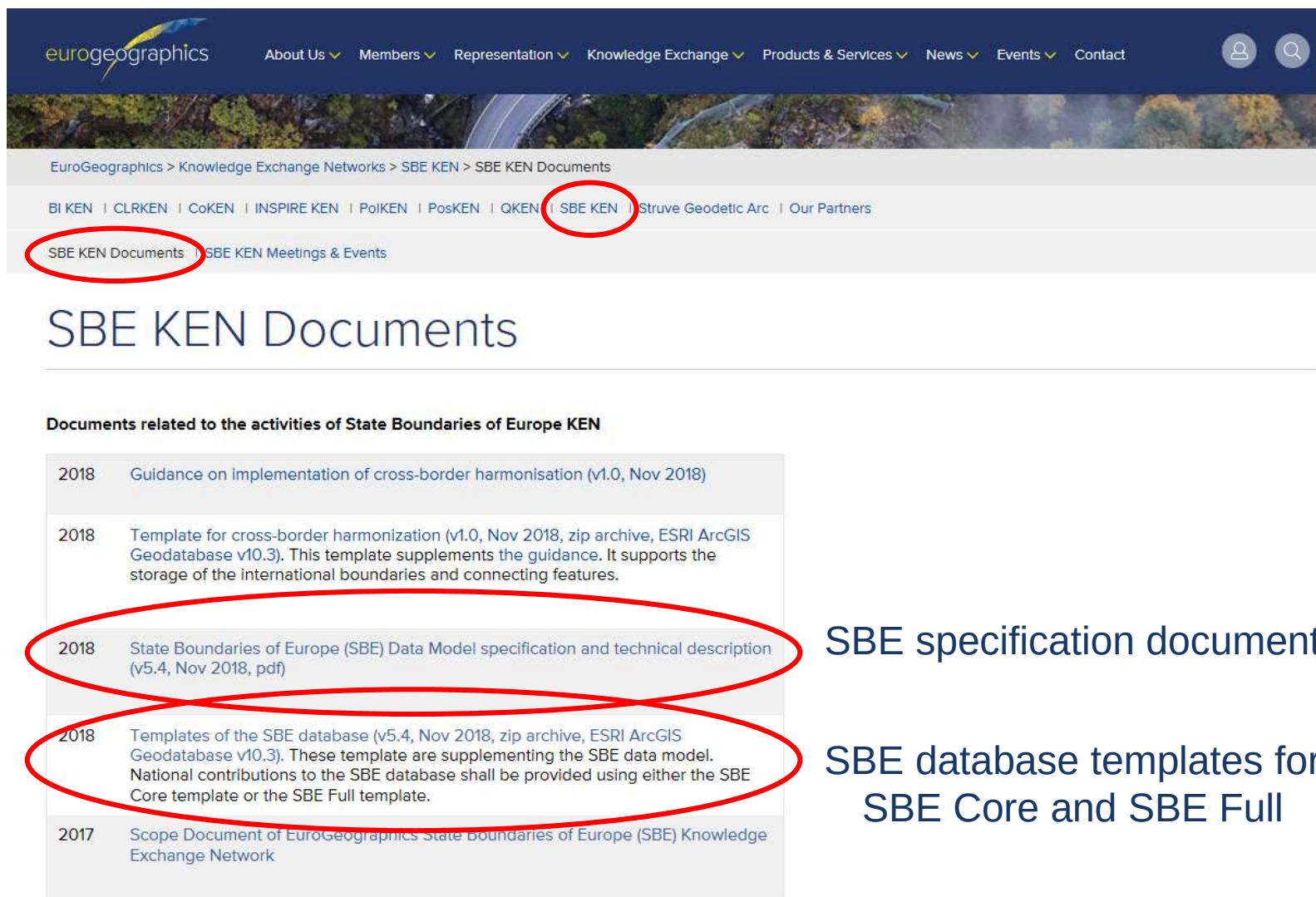
- + inspireId: esriFieldTypeString
- + beginLifespanVersion: esriFieldTypeDate
- + endLifespanVersion: esriFieldTypeDate

SBE Full



SBE specification document

- Narrative description of the data model
- Feature catalogue
- Information on reference systems
- Annex: changes from previous model (v4.13) to new data model
- ...
- *Not ready yet, some parts will be added later*



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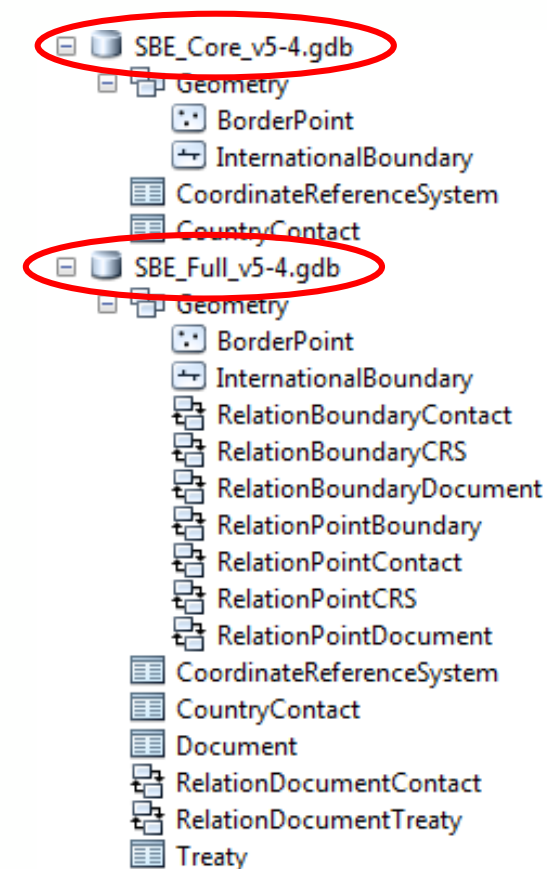
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2017	Scope Document of EuroGeographics State Boundaries of Europe (SBE) Knowledge Exchange Network

SBE specification document

SBE database templates for
SBE Core and SBE Full



Thanks for your attention

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