

Production EBM and ERM 2020

Regine Elling, Krystallo Grammenou,
Alexander Reichelt and Jörgen Spradau, BKG



Webinar of the EG Data Producers to kick-off production

Agenda

Review production year 2019

Production year 2020

International Boundary

ERM Validator

Information and data management



Review production year 2019

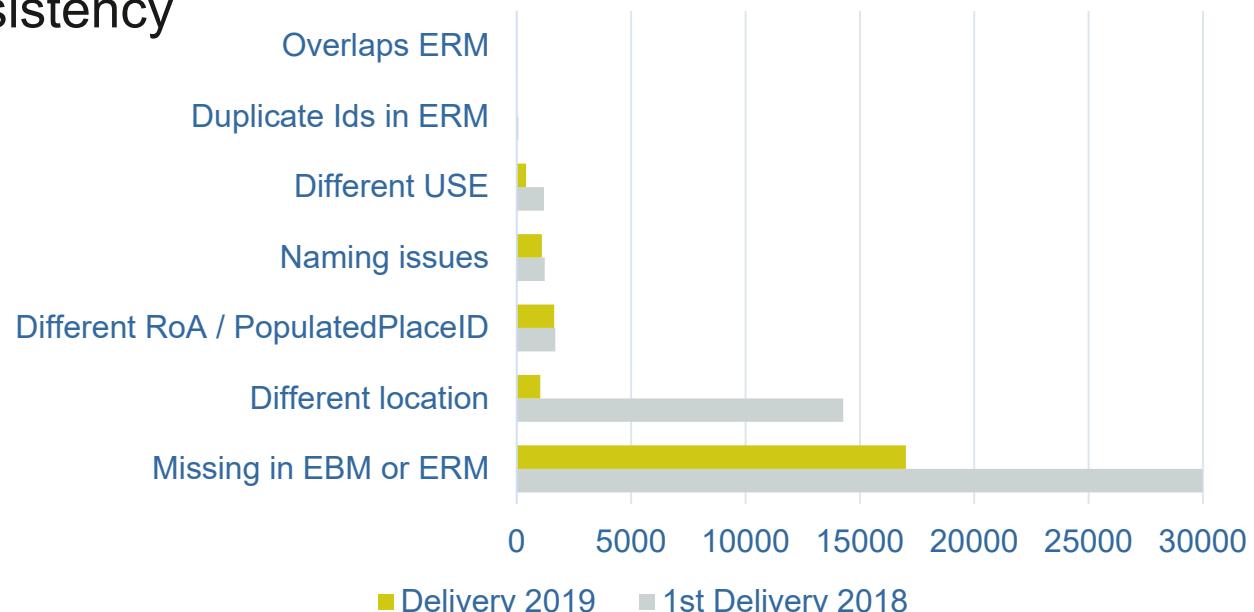
- Updated ERM themes: BND, HYDRO, POP
- No update of
 - Hungary
 - Croatia
 - Ukraine
 - Bulgaria
 - TEN-T by DG MOVE
- Calculated INSPIRE-ID for countries with no ID
- Harmonised watercourse features on border
- Delivery of EBM to Eurostat by 20th January 2020
- Remaining task:
Provide EBM 2020 and ERM 2020 to public



Review production year 2019

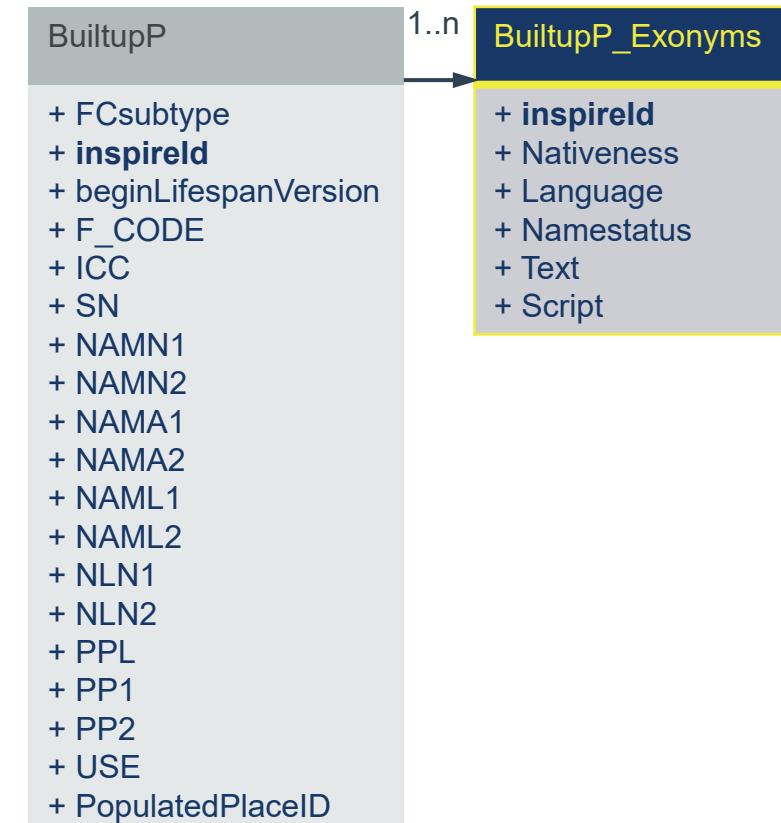
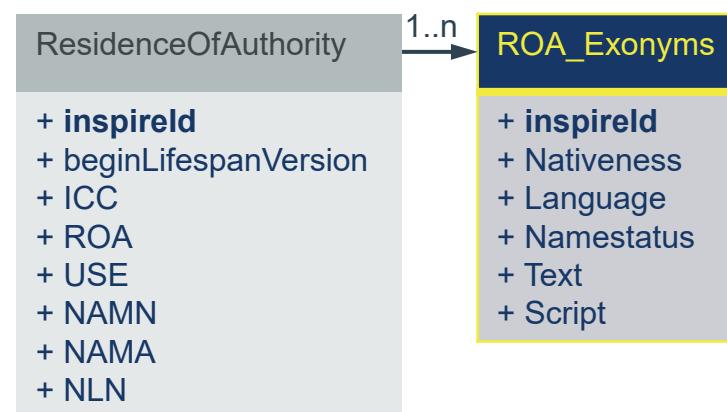
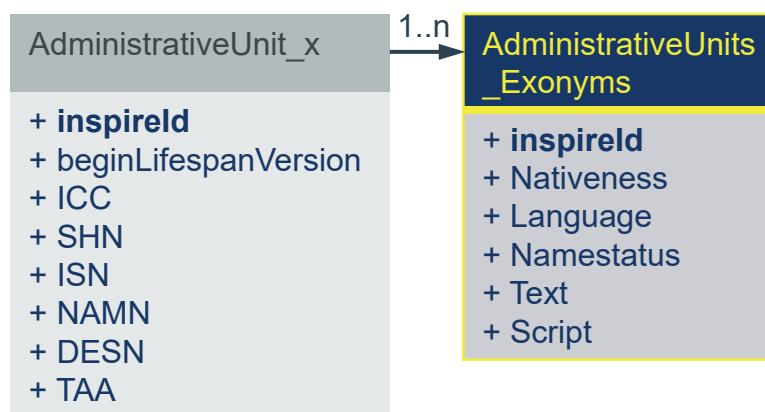
- Consistency assessment between EBM and ERM: BuiltupP ↔ Residence of Authority
 - In general much better consistency
 - Some countries used old USE-values (BKG corrected ES, PT, DK, LV, SE, RS, RO)
→ Please check Specification and Technical Guide
 - Please use ERM Validator to check consistency
 - BKG corrected USE-values for Croatia
(no data delivery 2019)

EBM: ResidenceOfAuthority	USE		ERM: BuiltupP (old)
1st order (country level)	1	=	1 1st order (country level) (23)
2nd order	2	=	2 2nd order (26)
3rd order	3	=	3 3rd order (30)
4th order	4	=	4 4th order (31)
5th order	5	=	5 5th order (111)
6th order	6	=	6 6th order (112)



Review production year 2019

- Integration of Exonyms in EBM and ERM (for EBM 2020 already done, ERM will follow)
- Purpose: Improvement of the EG Products with additional geographical names from EG Open Regional Gazetteer
- Linkage through inspireID with tables containing exonyms for AdministrativeUnits_x, ResidenceOfAuthority, BuiltupP



Production year 2020



Production year Product	2019 EBM 2020 / ERM 2020	2020 EBM 2021 / ERM 2021	2021 EBM 2022 / ERM 2022	2022 EBM 2022 / ERM 2022
EBM	x	x	x	x
ERM – BND	x	x	x	x
ERM – HYDRO	x		x	
ERM – TRANS		x		x
ERM – POP	x	x	x	x
ERM – MISC			x	
ERM – NAME			x	
ERM – VEG				x

Production year 2020

- Production Management at BKG
 - EBM: Krystallo Grammenou
 - ERM: Alexander Reichelt



Production year 2020

- Production Plan for EBM 2021 and ERM 2021 will be sent to Data Producers
 - Combined work plan for EBM, ERM and EGM
 - Describes all deliverables for Data Producers
- Documents (Specification, Technical Guide, ...) will be available soon
- Production Management System
 - Update contacts [contact persons](#)
 - Provide information of your production environment [production info](#)
 - Fill in National Production Plan until 31st March 2020 [national production plan](#)
 - Metadata and lineage information until 30th September 2020

→ Please refer to technical webinar October 2018

EG Meetings. download presentations and documents of meetings

Please select a meeting: [Technical Webinar Oct. 2018](#)

• [EBM ERM Metadata and Linage](#)

Production year 2020

	NMCA	Name english	EBM	ERM	EGM
	BKG	Federal Agency for Cartography and Geodesy	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

■ Contact information in PMS

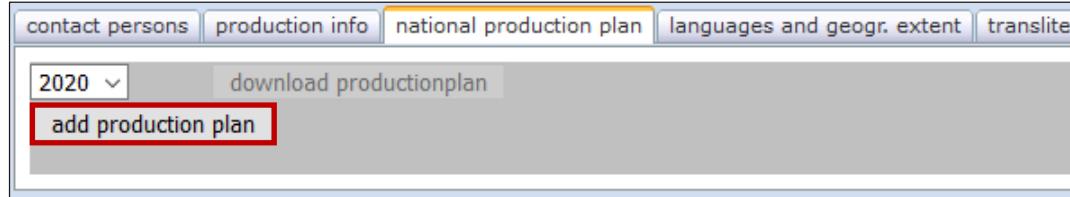
- NMCA
- Responsible persons

NMCA:	BKG	EBM: <input checked="" type="checkbox"/>	ERM: <input checked="" type="checkbox"/>	metadata contact: <input type="checkbox"/>
ERM Region:	Group A (The Netherlands (Ben))		Title: Mr	Firstname: Alexander
Name original:	Bundesamt für Kartographie und Geodäsie		Lastname: Reichelt	
Name englisch:	Federal Agency for Cartography and Geodesy		Department: Referat GI3	
Web:	www.bkg.bund.de		Jobtitle:	
	1 2		calling code: +49	location: Frankfurt am Main, Richard-Strauss-Allee 11
address 1:	Richard-Strauss-Allee 11		phone: 69 6333 4028	mobile:
address 2:			fax: 69 6333 441	
address 3:			mail_1: alexander.reichelt@bkg.bund.de	mail_2:
postalcode:	60598		EBM role:	
city:	Frankfurt am Main		ERM role:	National production coordinator (POC)
metadata address:	<input checked="" type="checkbox"/>		EGM role:	
			ERM Region Coordinator:	
			contact from:	2016 (YYYY)
			contact until:	<input type="text"/> (YYYY)

Not working for EG products any more?
Please set "contact until" year.

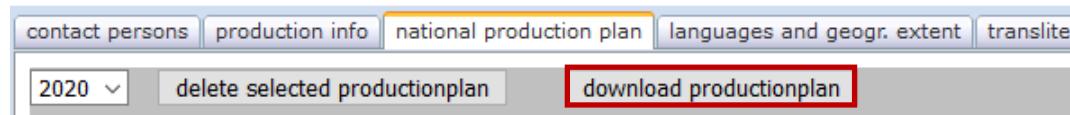
Production year 2020

- National production plan in PMS



contact persons production info national production plan languages and geogr. extent transliter

2020 download productionplan
add production plan



contact persons production info national production plan languages and geogr. extent transliter

2020 delete selected productionplan download productionplan

EuroBoundaryMap

The reference date of EBM 2021 is 31.12.2019. Can you provide your update according to this reference date?

please select

Update can be delivered to

Which type of EBM update will be provided?

please select

Additional comments:

The national update has to be provided by 30.6.2020. Can you meet this deadline?

please select

EuroRegionalMap

ERM-BND will be derived automatically from EBM. Are there any national issues or constraints concerning this?

please select

Data producers are asked for a real update of theme TRANS. Can you provide a full update?

please select

The national update of theme TRANS has to be provided by 30.6.2020. Can you meet this deadline?

please select

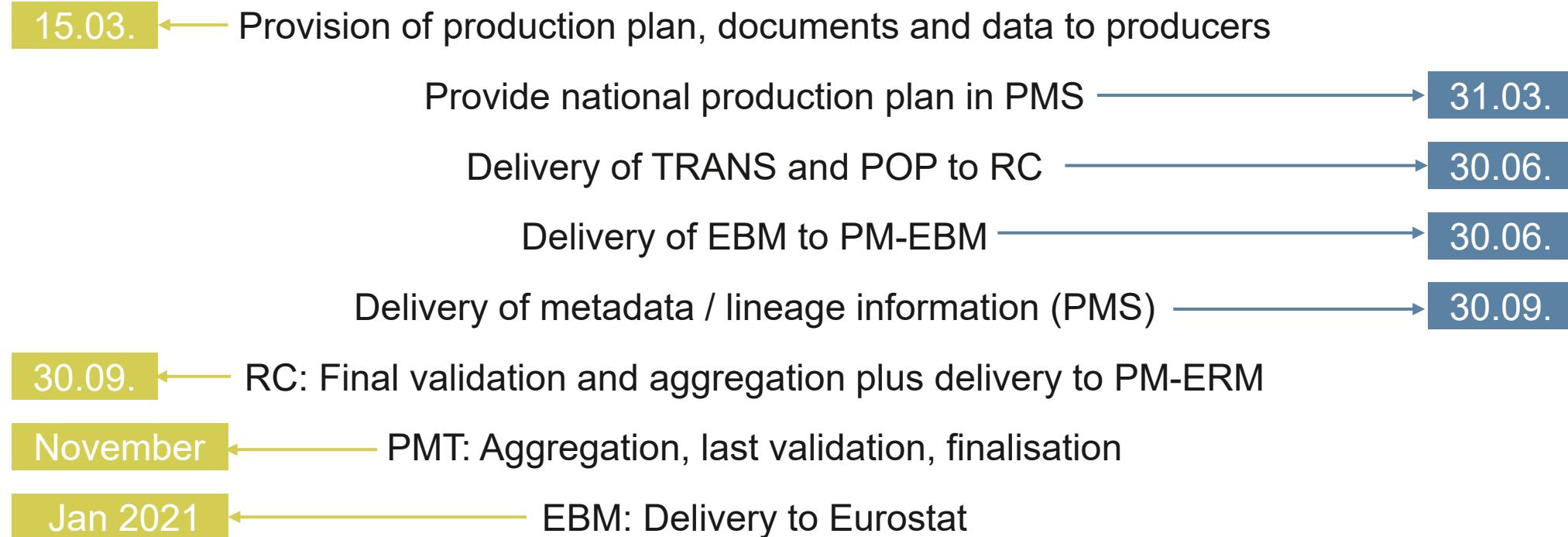
Data producers are asked for a real update of theme Settlement (POP). Can you provide a full update?

please select

The national update of theme POP has to be provided by 30.6.2020. Can you meet this deadline?

please select

Timetable for Production of EBM and ERM in 2020



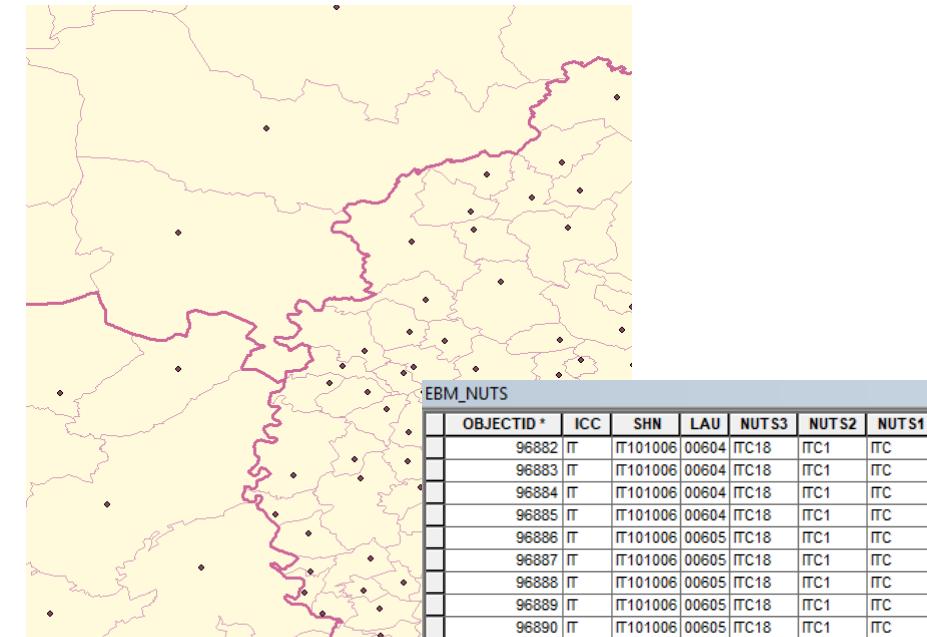
EBM Production in 2020

- Reference date: 31.12.2019
- Changes should be between 01.01.2019 and 31.12.2019
→ Effective Date
- EBM 2020 (NUTS 2016) is basis for upcoming provision
(see FTP server and/or [Eurostat](#))



EBM Production in 2020

- NMCAAs have to update the following content of the EBM database:
 - Feature class EBM_A → basic EBM geometry
 - Table EBM_NAM → basic EBM attribution
 - Feature class ResidenceOfAuthority
 - Table EBM_NUTS
→ Keep aware of regulation NUTS2016
 - Table EBM_ISN
- NMCAAs shall deliver only those feature classes or tables, where changes occur



EBM_NAM

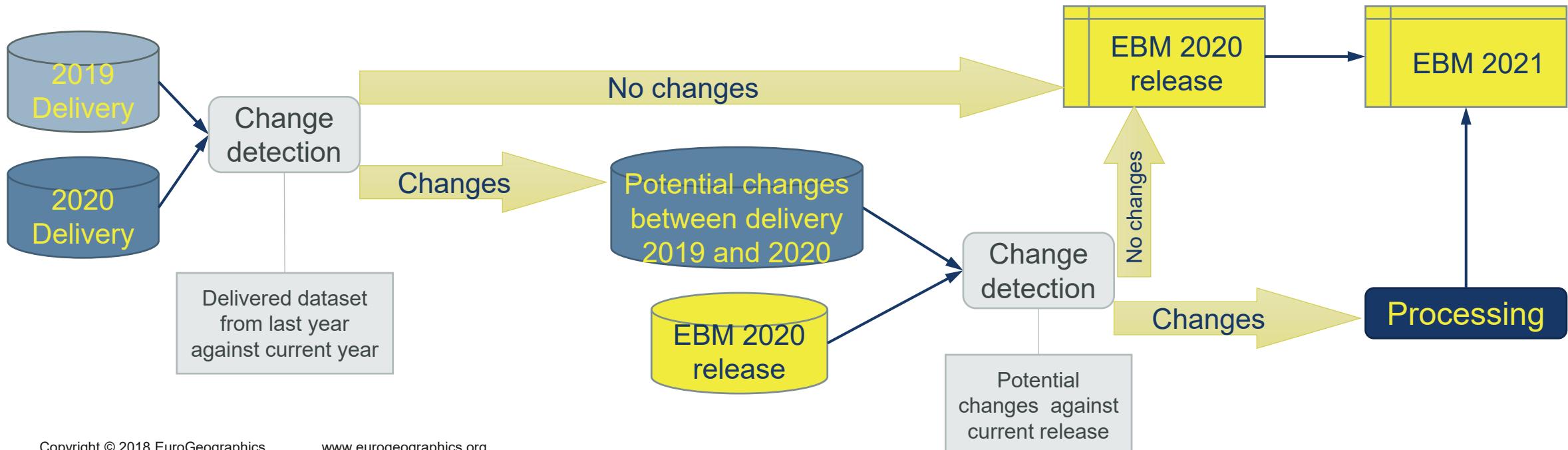
OBJECTID *	ICC	SHN *	USE	ISN	NAMN	NAMA	NLN	SHNupper	ROA	PPL	ARA	effectiveDate
241	AT	AT10903	4th order	4105	Deutsch Schützen-Eisenberg	Deutsch Schuetzen-Eisenberg	ger	AT10900	N.AT.BUILTUP.003039	1114	28,43	<Null>
242	AT	AT10904	4th order	4105	Grafenschachen	Grafenschachen	ger	AT10900	N.AT.BUILTUP.002128	1241	9,94	<Null>
243	AT	AT10905	4th order	4105	Großpetersdorf	Grosspetersdorf	ger	AT10900	N.AT.BUILTUP.001304	3538	31,36	02.03.2011
244	AT	AT10906	4th order	4105	Hannersdorf	Hannersdorf	ger	AT10900	N.AT.BUILTUP.003112	746	17,11	<Null>
245	AT	AT10907	4th order	4105	Kemeten	Kemeten	ger	AT10900	N.AT.BUILTUP.001675	1506	20,67	<Null>
246	AT	AT10908	4th order	4105	Kohfidisch	Kohfidisch	ger	AT10900	N.AT.BUILTUP.002188	1426	31,34	<Null>
247	AT	AT10909	4th order	4105	Litzelsdorf	Litzelsdorf	ger	AT10900	N.AT.BUILTUP.001902	1172	13,88	02.03.2010
248	AT	AT10910	4th order	4105	Loipersdorf-Kitzladen	Loipersdorf-Kitzladen	ger	AT10900	N.AT.BUILTUP.002094	1312	15,88	<Null>
249	AT	AT10911	4th order	4105	Mariasdorf	Mariasdorf	ger	AT10900	N.AT.BUILTUP.003005	1150	20,54	<Null>

EBM_ISN

OBJECTID *	ICC	ISN	USE	DESN	DESA	NLN	SHNdigit	DES_ENG	SU
37	CZ	4601	1st order	Stát	Stat	cze	2	Country	NUTS1
38	CZ	4603	2nd order	Kraj	Kraj	cze	5	Region	NUTS3
39	CZ	4604	3rd order	Okres	Okres	cze	6	District	Not applicable
40	CZ	4605	4th order	Obec	Obec	cze	12	Municipality	LAU
41	CZ	4606	2nd order	Kraj	Kraj	cze	5	Region	NUTS3
42	DE	1301	1st order	Bundesrepublik	Bundesrepublik	ger	2	Country	Not applicable
43	DE	1302	2nd order	Bundesland	Bundesland	ger	4	Federal state	NUTS1
44	DE	1308	3rd order	Regierungsbezirk	Regierungsbezirk	ger	5	Administrative district	Not applicable
45	DE	1310	4th order	Landkreis (Sonderverband)	Landkreis (Sonderverband)	ger	8	District	NUTS3

EBM Production in 2020

- New production workflow at BKG to validate Data Producers data / change detection
→ Support further processing



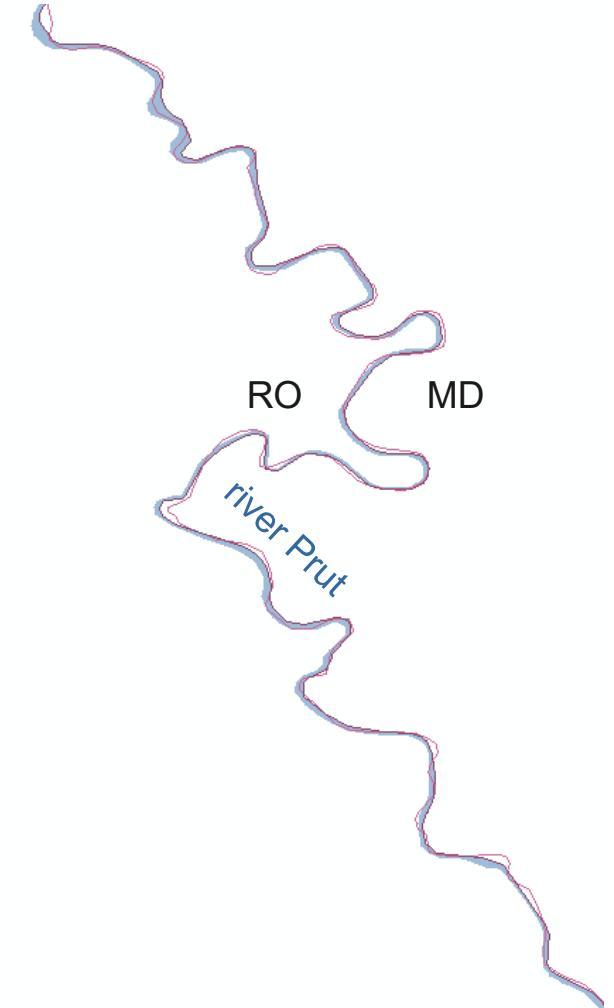
ERM Production in 2020

- Change of handling of missing attribute values
 - If information is missing for any reason then the value will be a default value
 - Easy to understand for Data Producers and Users
 - Simplification of validation

Attribute type	<ul style="list-style-type: none">- Information cannot be applied- Information is missing- Information exists but has not been collected- Information doesn't exist
Text	UNK
Integer	-32768

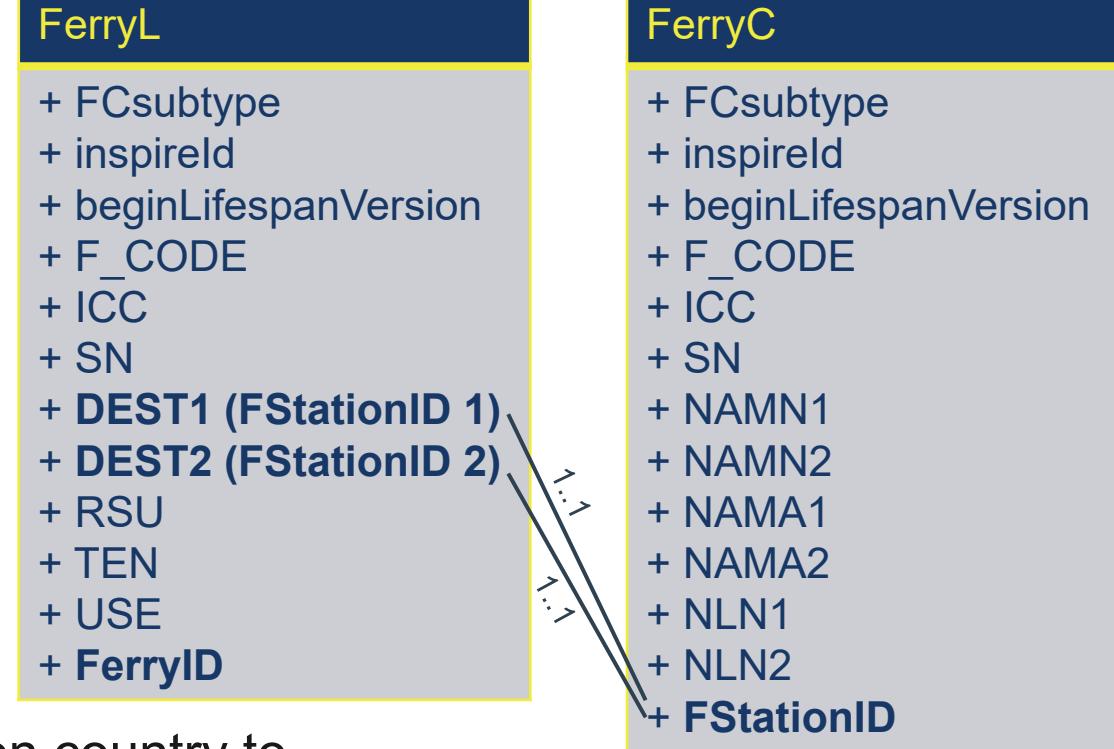
ERM Production in 2020

- ERM-BND:
 - Derived from EBM
 - Issues to be solved: Border between Romania and Moldova
- Update:
 - Theme Settlements
 - Consider consistency with EBM
 - Take care of USE value
 - Theme Transport
 - Keep TEN and TENTEC_ID (no update of DG MOVE planned)
 - LevelC, IntercC → See revised Technical Guide
 - Modelling of ferries



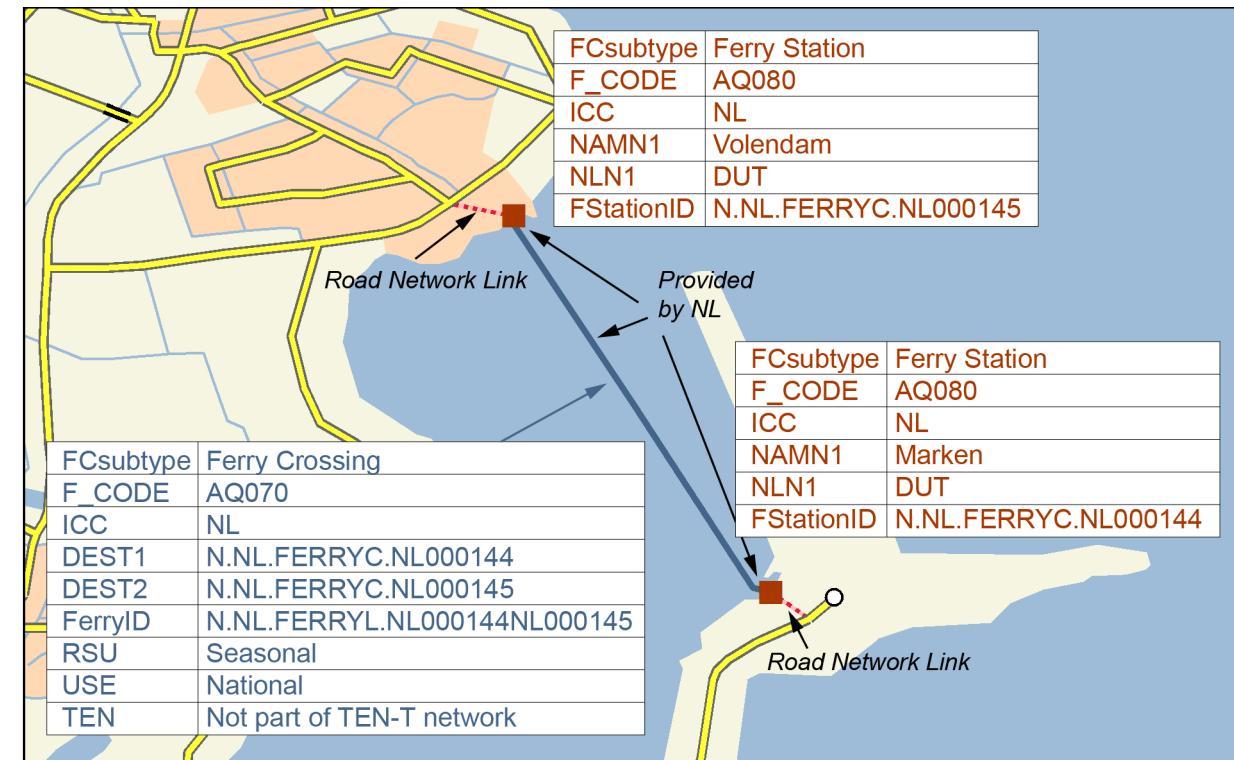
ERM Production in 2020

- New modelling of ferries
 - Easy to understand for Data Producers and Users
 - BKG:
Provide ferries in new model
(based on updated ferries in 2018)
→ Data Producers should use this dataset to update their ferries!
 - Data Producers:
 - Consider CFPs for international ferry lines
 - Get in contact with colleagues in destination country to coordinate common attribution



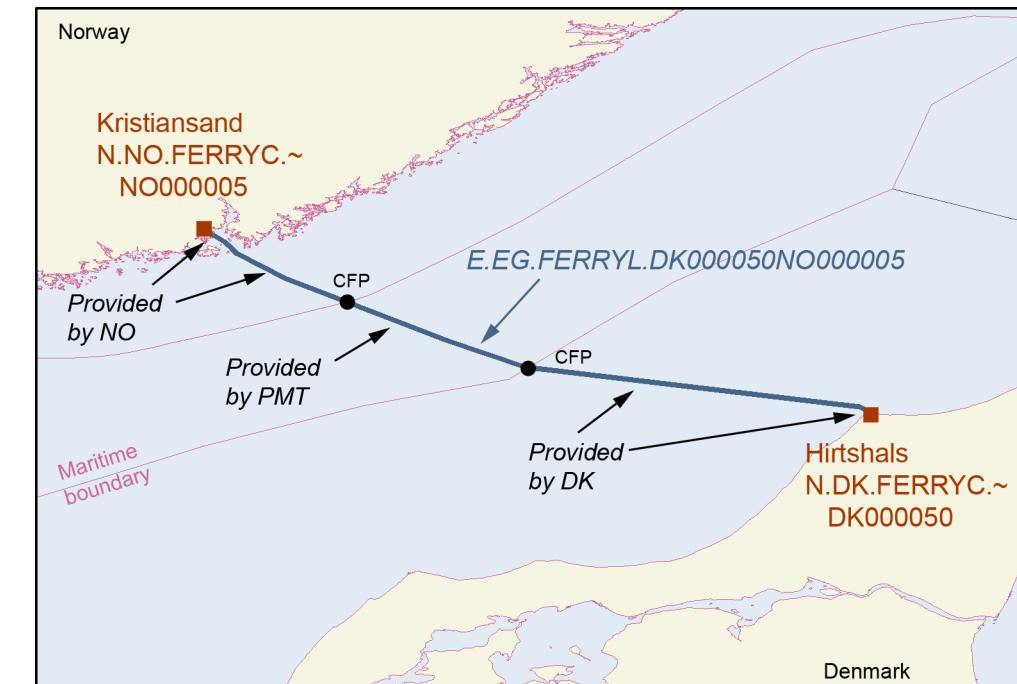
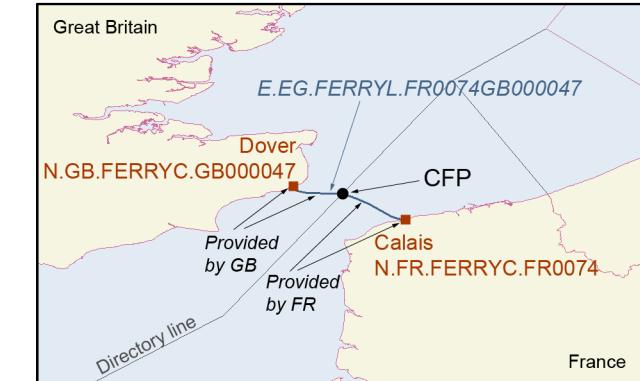
ERM Production in 2020

- New modelling of ferries: Example for national ferry line
 - FerryC: Attributes kept stable
 - FerryL:
 - DEST1 and DEST2: Hold the Ferry Station Identifiers (FStationID) of the start and the end of the ferry line
 - No related tables any more



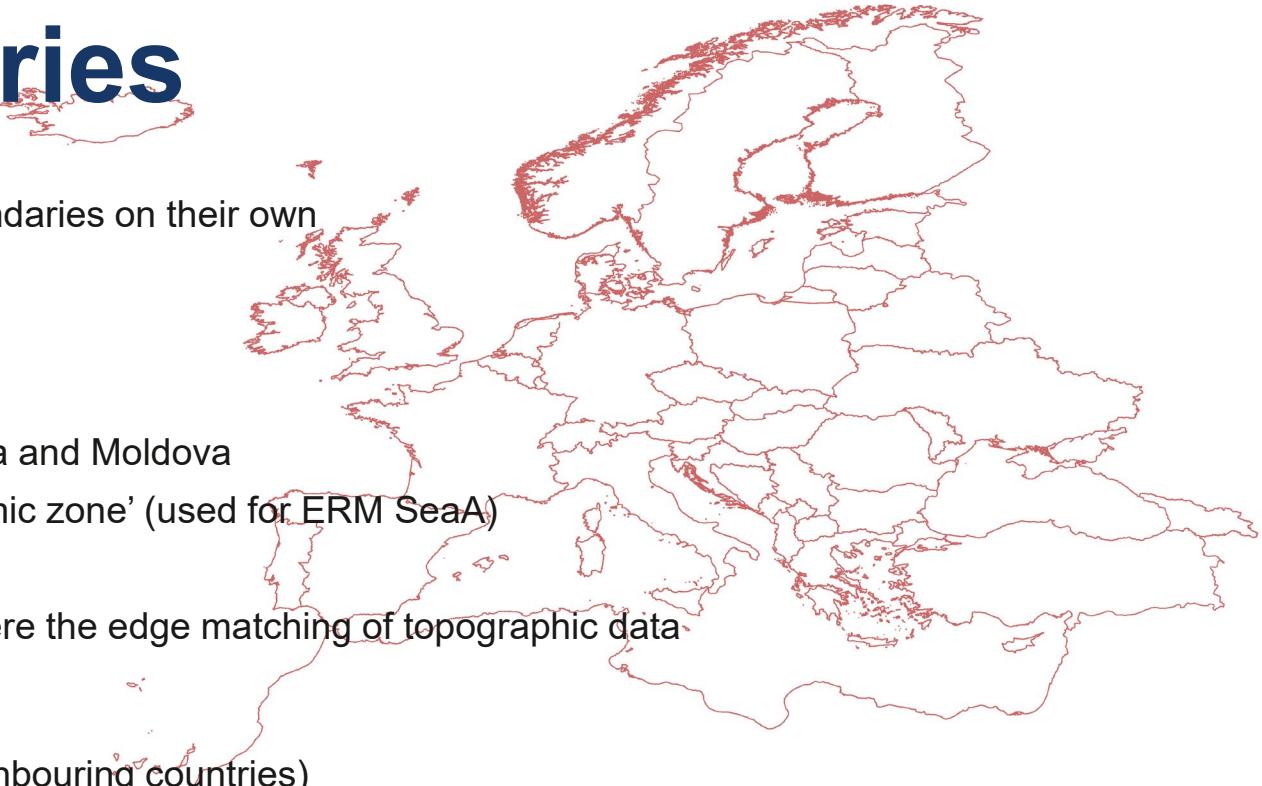
ERM Production in 2020

- New modelling of ferries: Example for international ferry line
 - Attributes between Data Producers have to be agreed (ICC, DEST1, DEST2, RSU, TEN, USE, FerryID)
 - Data Producer provide data until agreed CFP
 - If necessary BKG will provide “middle part” of ferry line
 - Changes have to be announced to
 - Data Producer in destination country and
 - Production Management Team
 - Provide only real changes to avoid work
→ Don’t deliver ferry line if there are no changes



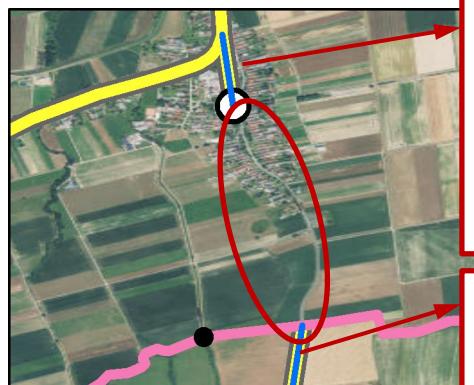
International Boundaries

- NMCAs are not allowed to make any changes on these boundaries on their own
- In case of issues → contact ebm@bkg.bund.de
- IB_Regional_2021.gdb (on FTP server):
 - InternationalBoundary: Has to be used for EBM/ERM
 - InternationalBoundary_ERM: Border between Romania and Moldova
 - MaritimeBoundary: 'territorial sea' or 'exclusive economic zone' (used for ERM SeaA)
 - ConnectingFeaturePoint:
 - Store points on the international boundaries, where the edge matching of topographic data has been already agreed for ERM
 - Match your ERM updates to these points (or use them to discuss edge matching with neighbouring countries)
 - FeaturesOnBorder:
 - Point and line features located on the international boundary
 - If there are no changes Data Producers shall not deliver those features again! If changes occur please perform edge matching.



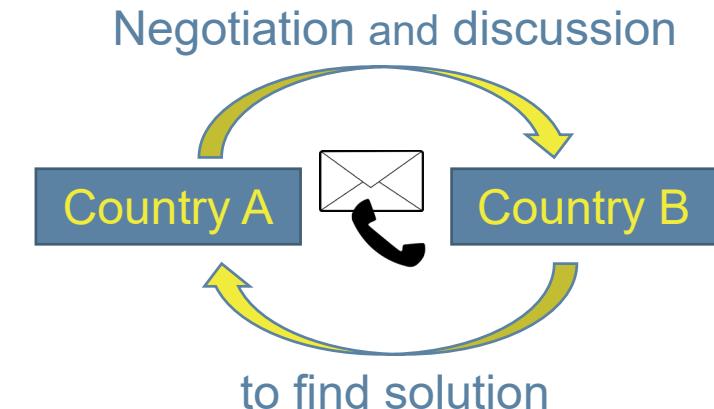
International Boundaries

- Edge matching
 - Please consider presentation from last year
→ Kick-Off Webinar Mar. 2019:
Edge matching (2019-03-20_Edge_matching.pdf)
 - Hints for data producers will be sent:



Field 'comment':
Countries: AT, HU,
Edgematching:
revise, connect line to
border, prove CFP

Field 'comment':
Countries: HU, AT,
Edgematching: AT line
discontinues, CFP
missing

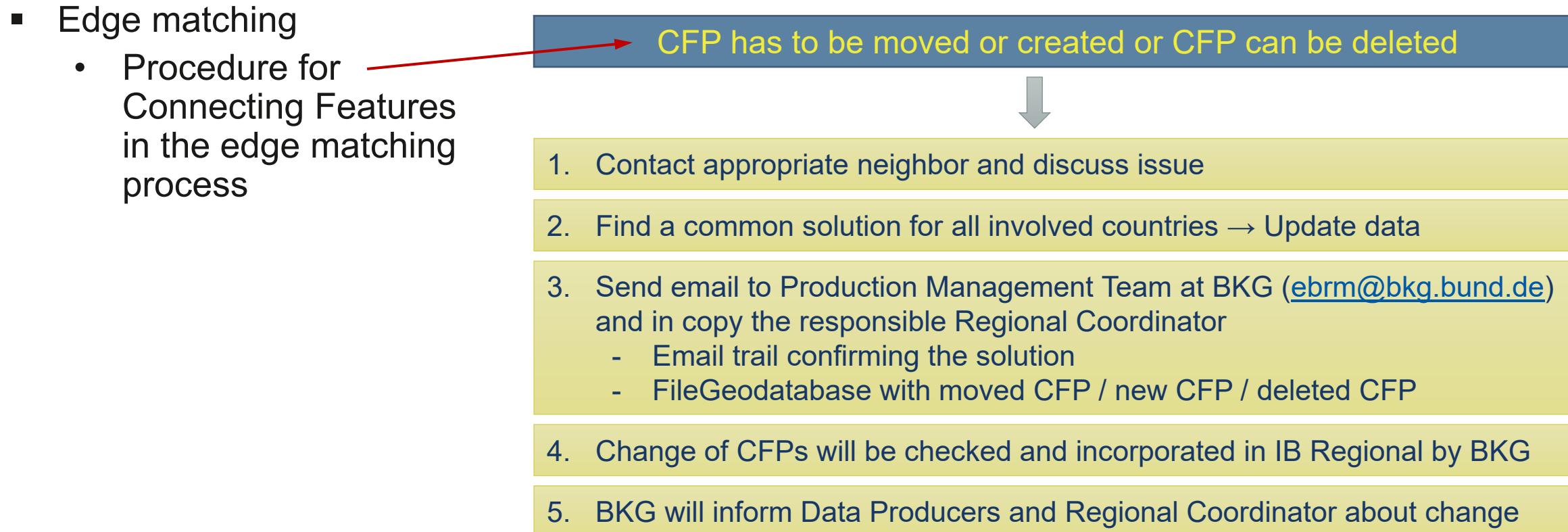


EG Meetings. download presentations and documents of meetings

Please select a meeting:

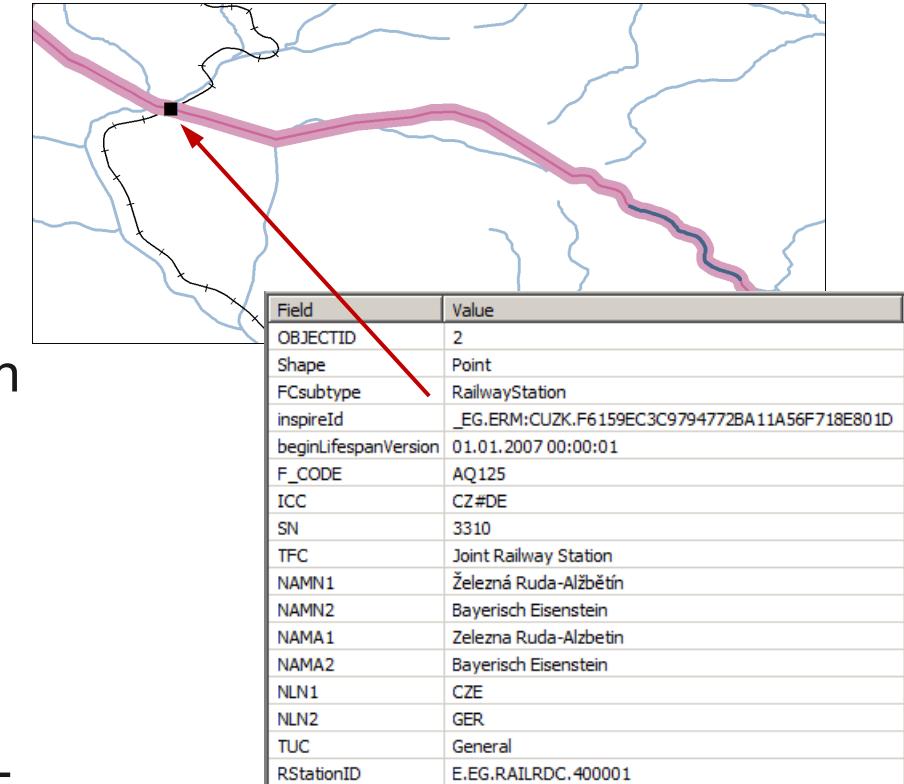
- [Agenda](#)
- [Production 2019 EBM and ERM](#)
- [Production 2019 EGM](#)
- [ERM Validator](#)
- [Edge matching](#)
- [Update from EuroGeographics Head Office](#)
- [What's new in PMS: Import of ERM validation log-file](#)

International Boundaries



International Boundaries

- Features located on the International Boundary
 - Stable International Boundary
→ Stable features with correct and complete attribution (e.g. ICC-Codes separated by "#")
 - IB_Regional_2021.gdb → ERM_FeaturesOnBorder
 - Provided by Production Management Team at each kick-off for production
 - Affected feature classes:
DamC, DamL, RailrdC, RapidsC, RoadL, WatrcrsL
 - If no real changes occur
→ **Data Producer have to exclude features located on the International Boundary from their delivery**



International Boundaries

- Features located on the International Boundary
 - Procedure if real changes occur

Real change of features on IB

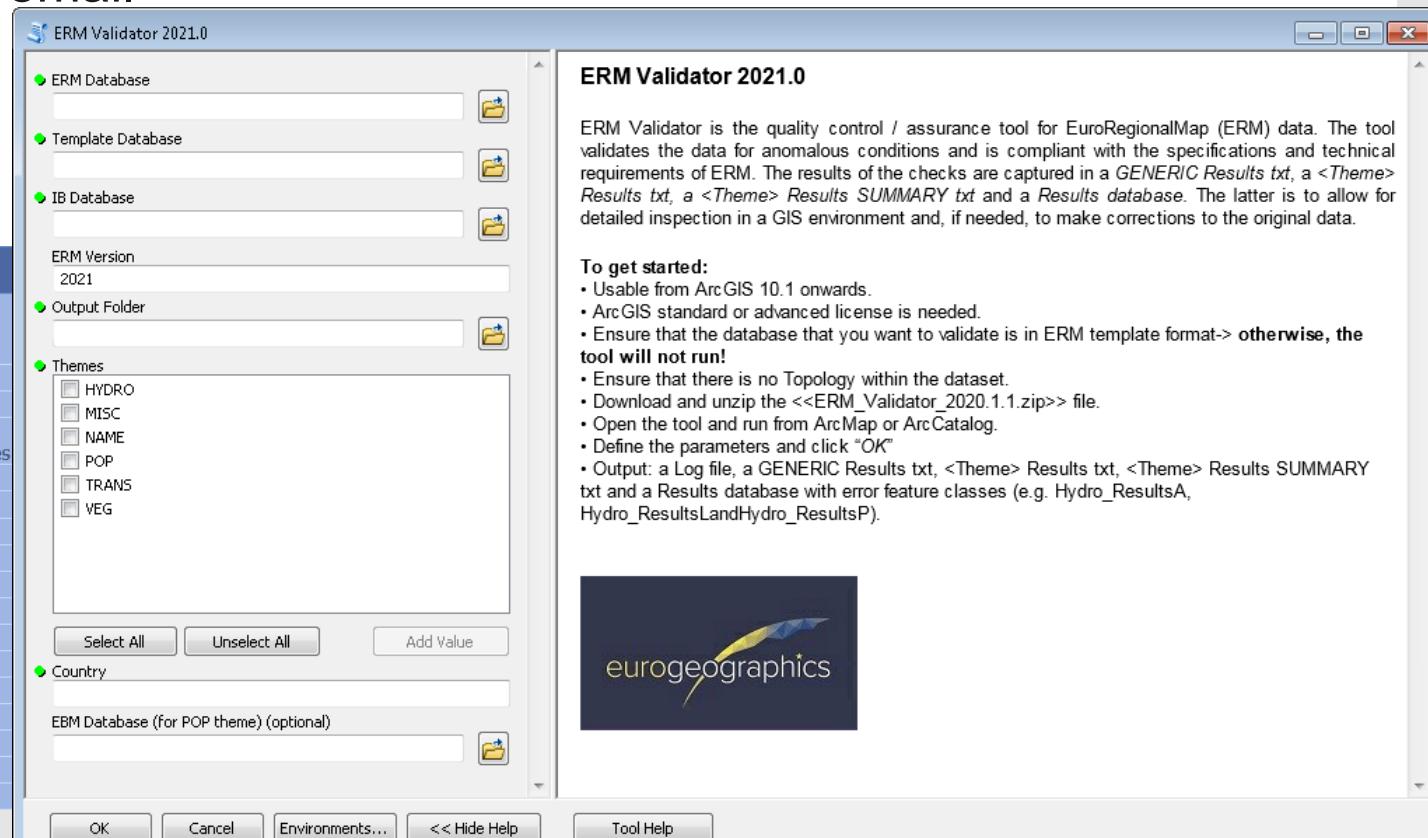


1. NMCAs have to apply edge matching process
2. NMCAs have to inform Regional Coordinator about the agreed new solution and send new features within an extra database
3. Validation of changed features by Regional Coordinator
4. Regional Coordinator send validated features to ERM Production Management Team within an extra database
5. Production management updates the IB Regional ERM_FeaturesOnBorder dataset

ERM Validator

- Publication of ERM Validator 2021 by end of March on BKG-FTP: \ERM_Validator
→ Data Producers will be informed via email
- Checks for themes Settlements and Transport are updated according to changes in specification

	Validation code	Check
General Data Delivery	T001	feature classes AIRFLDA, AIRFLDC, AIRFLDP, EXITC, FERRYC, FERRYL, HARBORA, HARBORC, HARBORL, HARBORP, HELIP, INTERCC, LEVELCC, MISAEROP, RAILRDC, RAILRLD, RESTC, ROADL, RUNWAYL
	T003	coordinate system (GEOGRAPHIC, decimal degrees)
	T004	map extent (-25° < Lambda < 40° and 30° < Phi < 80°)
	T005	AIRFLDA, AIRFLDC, AIRFLDP, FERRYC, FERRYL, HARBORA, HARBORC, HARBORP, INTERCC, LEVELCC, RAILRDC, RAILRLD, RESTC, ROADL, RUNWAYL must have features
	T006	Valid Geometry
Geometric resolution (Tested in projection ETRS89 LAEA)	T007	minimum allowed area size: 60 000m ²
	T008	minimum allowed distance between vertices of line and area features: 5m
	T009	minimum allowed length of a line segment: 50m
	T010	statistics of average distance between vertices
	T011	The number of HARBORA areas less than 400 000m ²
Geometric resolution (Tested in projection ETRS89 LAEA)	T012	The number of AIRFLDA areas less than 400 000m ²
	T013	The number of RAILRLD features less than 1600m
	T014	The number of FERRYL features less than 125m
	T015	geometrical definitions (polygon, polyline, point)
Data Model and attributes structure	T016	attributes: complete list, ordering, definition
	T017	attributes: have valid values (FCSubtype, F_CODE)
	T080	attributes: no NULL values



Information and data management

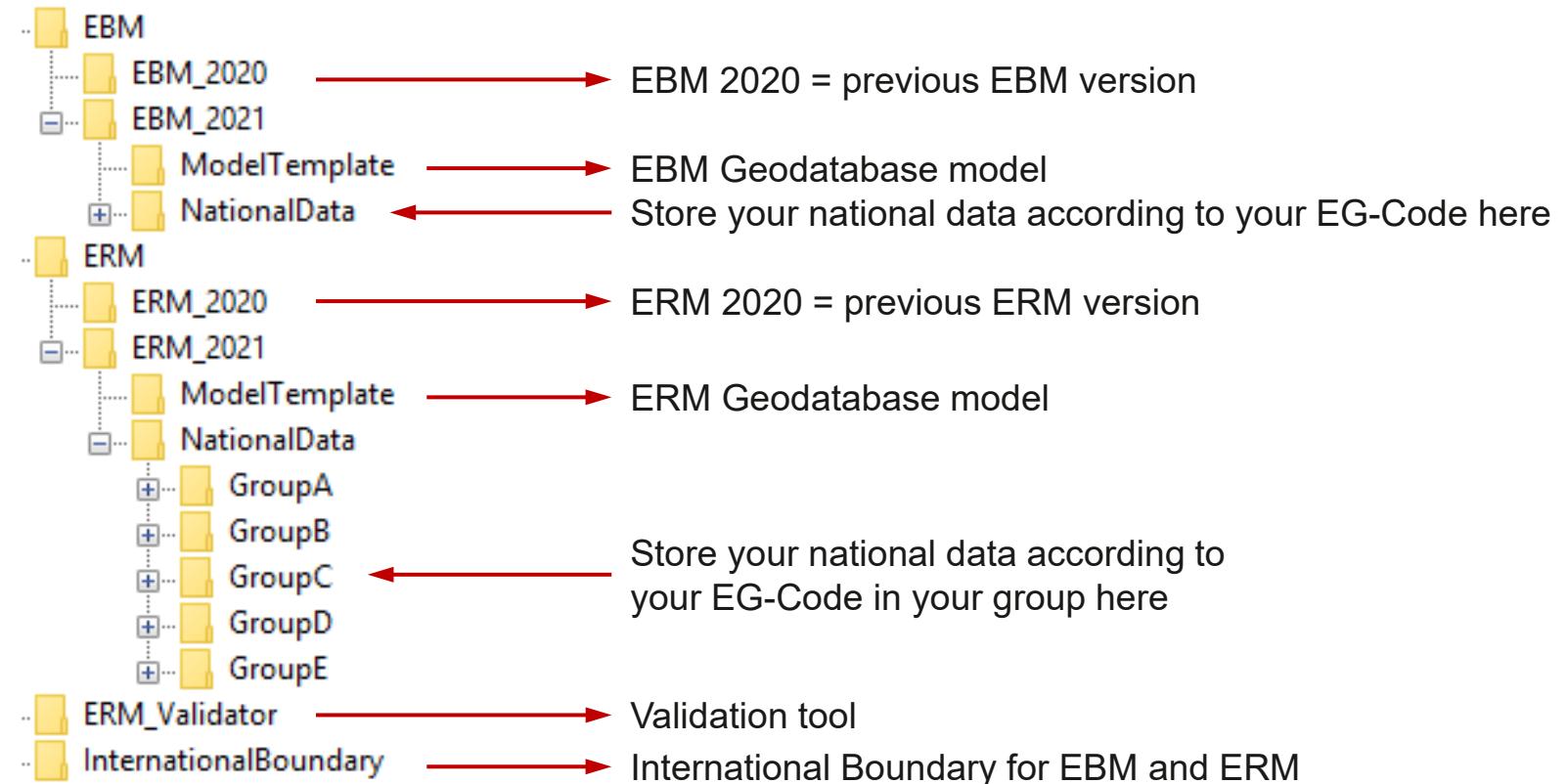
- Information exchange: Production Management System → <https://ebrm.bkg.bund.de/pms>
 - Access information for you did not change
 - Contacts
 - Technical documents, PPT from meetings
 - Metadata and lineage information
- Data exchange: BKG-FTP → <ftp://ftp.bkg.bund.de>
 - Please use FTP program
 - Access information: Username did not change, new password: **EG_ka#2020**
 - Take care of naming conventions:
 - From Data Producers (NMCAs) to Regional Coordinator:
→ ERM_2021_ICC_THEME-THEME_YYYYMMDD.ZIP
 - From Regional Coordinator to Data Producers (NMCAs):
→ ERM_2021_ICC_THEME-THEME_YYYYMMDD_QA**Number**.ZIP
 - From Regional Coordinator to Production Management Team:
→ ERM_2021_Group**X**_THEME-THEME_YYYYMMDD.ZIP

EBM, ERM and EGM Production Management System

EG Contact/Product Database. organize the contacts and products

Information and data management

- Structure of BKG-FTP:



Contact

- If you have any questions concerning the production or you have understanding issues please contact your Regional Coordinator or the Production Management Team at BKG

BKG	Krystallo Grammenou, Alexander Reichelt	ebrm@bkg.bund.de
Group A	Tony Baving	tony.baving@kadaster.nl
Group B	Vincent Beauche	vincent.beauche@ign.fr
Group C	Aliona Milentjeva (Giedrė Beconytė, Jelena Vaitkeviciene)	a.milentjeva@gis-centras.lt g.beconyte@gis-centras.lt , j.vaitkeviciene@gis-centras.lt
Group D	Andreas Pammer, Miriam Tanzer	andreas.pammer@bev.gv.at , miriam.tanzer@bev.gv.at
Group E	Constantin Nagorneac	cnagorneac@gmail.com

- If you have any questions concerning the ERM Validator please contact Kadaster NL
→ QMEG@kadaster.nl
- If you have any questions concerning EuroGeographics, the contract with Eurostat or licensing please contact Angela Baker → angela.baker@eurogeographics.org

Webinar of the EG Data Producers to kick-off production

Thank you for your attention

Contact:

Krystallo Grammenou and Alexander Reichelt
Federal Agency for Cartography and Geodesy
Richard-Strauss-Allee 11
60598 Frankfurt am Main / Germany

Email: ebrm@bkg.bund.de

