

This section describes the implementation of ETIM BMEcat in the Norwegian central database for electrical products (EFObasen).

a. Use of the term Catalog

EFObasen does not organize the data in a catalog, and no catalog information (version, name, etc.) will be stored.

b. Status definitions

EFObasen works with both a product status and a product state. The product status describes a product lifecycle whereas the state describes the product's availability.

Possible product statuses are:

- 10 – Under registration
- 20 – Active
- 50 – Awaiting approval
- 60 – Not approved
- 90 – Deleted

Possible states are:

- Available
- Not available

c. Importing data to EFObasen

BMEcat defines two transactions for exchanging product data; T_NEW_CATALOG and T_UPDATE_PRODUCTS. As EFObasen does not adhere to any catalog paradigm, both of these transactions are allowed when importing data. The attribute «mode» and the element «status» are used to describe the state of the product. The following matrix explains how these values are interpreted by EFObasen:

Combination #	Transaction	«mode»	«status»	Explanation
1	T_NEW_CATALOG	new	new	The product is defined as a new product which is not yet available . EFObasen will create the product with an indication that the product is not yet available. This combination is only valid if the product is not yet registered in EFObasen. If the product already exists, the product is updated, but the availability is not updated.
2	T_NEW_CATALOG	new	new_product	The product is defined as a new product which is available . If the product does not exist, the product is created and marked as available. If the product exists, the product is updated and marked as available.
3	T_NEW_CATALOG	new	old_product	Same as combination 2. Although the two combinations work the same in this version, combination 2 is preferred as future implementations may repurpose this combination.
4	T_UPDATE_PRODUCTS	new	new	Same as combination 1.
5	T_UPDATE_PRODUCTS	new	new_product	Same as combination 2.
6	T_UPDATE_PRODUCTS	new	old_product	Same as combination 3.
7	T_UPDATE_PRODUCTS	update	new_product	Same as combination 2, but this is the preferred combination for existing products.
8	T_UPDATE_PRODUCTS	update	old_product	This combination marks an existing product as not available. If the product does not exist, the import of this product will fail.
9	T_UPDATE_PRODUCTS	delete	n/a	Deletes an existing product.

Other combinations are not supported by EFObasen, and such transactions will fail.

d. Exporting from EFObasen

When exporting from EFObasen, the transaction will always be T_NEW_CATALOG with the «mode» = «new». The only exception being the EFO synchronizer service, which is not described in this document.

The «status» attribute will be «new » if the product is marked as not available and the product status is 20 (active), otherwise this attribute will have the value of «new_product». Regardless of the value in the «status» attribute, the value of the PRODUCT_STATUS element will contain the EFO status number (as described in point b.).

e. BMEcat to EFObasen field mapping

The following table lists all the fields in BMEcat and how they are used in EFObasen. The fieldnames are listed as they appear in EFObasen (Norwegian names). Fields found in EFObasen, but not in BMEcat or ETIM are transferred in a separate PRODUCT_FEATURES element (see 9.f).

Note: Fields marked as «++Yes», indicates that the field is not mandatory in ETIM BMEcat General, but is required for EFObasen

Element	Required	EFO field name	Import remarks	Export remarks
BMECAT	Yes	-	-	-
HEADER	Yes	-	-	-
GENERATOR_INFO	No	-	The value will not be saved	Will always be "EFObasen"
CATALOG	Yes	-	-	-
LANGUAGE	Yes	-	If the language is not Norwegian Bokmål ("nob"), only ETIM features are imported	Only Norsk Bokmål ("nob") will be exported
LANGUAGE default	No	-	See previous point	«Norsk bokmål» is used as the default language
CATALOG_ID	Yes	-	The value will not be saved	Will always be «EFObasen_[DATO]».
CATALOG_VERSION	Yes	-	The value will not be saved	Will always be 0
CATALOG_NAME	+Yes	-	The value will not be saved	Will always be "EFObasen"
DATETIME in the context of CATALOG	+Yes	-	-	-
DATETIME type = "generation_date"	+Yes	-	This value is ignored, but if a date is supplied, this should have the value "generation_date"	Will always be "generation_date"
DATE	+Yes	-	The value will not be saved	Will always be the export date
TERRITORY	No	-	The value will not be saved	Will always be "NO"
CURRENCY	No	-	n/a	n/a
MIME_ROOT	No	-	Used in conjunction with the mime information. This value is not stored specifically	Contains the base URL for any file located on the EFObasen server
BUYER	+Yes	-	-	-
BUYER_ID	No	-	n/a	n/a
BUYER_ID type = "buyer_specific"	+Yes	-	Not relevant	Not relevant
BUYER_NAME	Yes	-	The value will not be saved	Will always be "EFObasen"
SUPPLIER	Yes	-	-	-

SUPPLIER_ID type="duns"	No	-	Not used (COUNTRY_BRANCH_SUPPLIER_ID is used to identify the supplier)	Not used (COUNTRY_BRANCH_SUPPLIER_IDS is used to identify the supplier)
SUPPLIER_ID type="in"	No	-	Not used (COUNTRY_BRANCH_SUPPLIER_ID is used to identify the supplier)	Not used (COUNTRY_BRANCH_SUPPLIER_IDS is used to identify the supplier)
SUPPLIER_NAME	Yes	-	The value will not be saved	Will always be "EFObasen"
ADDRESS in context SUPPLIER	No	-	-	Not used
ADDRESS type ="supplier"	+Yes	-	The value will not be saved	Not relevant
CONTACT	No	-	The value will not be saved	Not relevant
STREET	No	-	The value will not be saved	Not relevant
ZIP	No	-	The value will not be saved	Not relevant
CITY	No	-	The value will not be saved	Not relevant
COUNTRY	No	-	The value will not be saved	Not relevant
VAT_ID	No	-	The value will not be saved	Not relevant
EMAIL	Yes	-	The value will not be saved	Not relevant
URL	No	-	The value will not be saved	Not relevant
MIME_INFO	No	-	Ignored	Not used
MIME	Yes	-	Ignored	Not relevant
MIME_TYPE	+Yes	-	Ignored	Not relevant
MIME_SOURCE	Yes	-	Ignored	Not relevant
MIME_DESCR	No	-	Ignored	Not relevant
MIME_ALT	No	-	Ignored	Not relevant
MIME_PURPOSE	+Yes	-	Ignored	Not relevant
USER_DEFINED_EXTENSIONS in context HEADER	+Yes	-	-	-
UDX.EDXF.VERSION	+Yes	-	-	-
T_NEW_CATALOG	Yes	-	-	-
PRODUCT in context T_NEW_CATALOG	+Yes	-	-	-
SUPPLIER_PID	Yes	Leverandørens produktnummer	-	-
PRODUCT_DETAILS	Yes	-	-	-
DESCRIPTION_SHORT	Yes	Varetekst	EFObasen restricts this field to 30 characters	EFObasen restricts this field to 30 characters
DESCRIPTION_LONG	No	Teknisk beskrivelse	EFObasen restricts this field to 4000 characters	EFObasen restricts this field to 4000 characters
INTERNATIONAL_PID	No	-	-	-
INTERNATIONAL_PID type=...	+Yes	GTIN nummer	-	-
SUPPLIER_ALT_PID	No	-	Ignored	n/a
BUYER_PID	No	-	Ignored	n/a
BUYER_PID type=...	+Yes	-	Ignored	n/a
MANUFACTURER_PID	No	Produsentens varenummer	-	-

MANUFACTURER_NAME	No	Fabrikat/Merke		
MANUFACTURER_TYPE_DESCR	No	Produsentens varebetegnelse		
SPECIAL_TREATMENT_CLASS	No	Behandlingsklasse		
SPECIAL_TREATMENT_CLASS type=...	Yes	Behandlingsklasse		
KEYWORD	No	Nøkkelord		
REMARKS	No	-	Ignored	n/a
REMARKS type=...	+Yes	-	Ignored	n/a
PRODUCT_STATUS	No	-	-	-
PRODUCT_STATUS type=...	Yes	-	See point c.	See point d.
PRODUCT_FEATURES	+Yes	-	-	Not relevant
REFERENCE_FEATURE_SYSTEM_NAME	+Yes	-	See point f. for EFObasen specific properties	See point f. for EFObasen specific properties
REFERENCE_FEATURE_GROUP_ID	+Yes	-	See point f. for EFObasen specific properties	See point f. for EFObasen specific properties
FEATURE	+Yes	-	-	-
FNAME	Yes	-	See point f. for EFObasen specific properties	See point f. for EFObasen specific properties
FVALUE	Yes	-	See point f. for EFObasen specific properties	See point f. for EFObasen specific properties
FUNIT	No	-	Ignored for ETIM properties. See point f. for EFObasen specific properties	Not supplier for ETIM properties. See point f. for EFObasen specific properties
FVALUE_DETAILS	No	-	Ignored	Not relevant
PRODUCT_ORDER_DETAILS	Yes	-	-	-
ORDER_UNIT	Yes	Prisenhet		If no unit has been registered for this product, the code for PIECE (C62) will be returned
CONTENT_UNIT	Yes	Grunnenhet		If no unit has been registered for this product, the code for PIECE (C62) will be returned
NO_CU_PER_OU	No	Antall grunnenhet i prisenhet		
PRICE_QUANTITY	No	-	Ignored	Not relevant
QUANTITY_MIN	No	-	Ignored	Not relevant
QUANTITY_INTERVAL	No	-	Ignored	Not relevant
PRODUCT_PRICE_DETAILS	Yes	-	-	-
DATETIME in context of PRODUCT_PRICE_DETAILS	+Yes	-	-	-
DATETIME type = "valid_start_date"	+Yes	-	Ignored	Will always be "valid_start_date"
DATE	Yes	-	Ignored	Will always be date of export
DATETIME in context of PRODUCT_PRICE_DETAILS	No	-	-	-
DATETIME type = "valid_end_date"	+Yes	-	Ignored	Not relevant
DATE	Yes	-	Ignored	Not relevant

DAILY_PRICE	No	-	Ignored	Not relevant
PRODUCT_PRICE	Yes	-	-	-
PRODUCT_PRICE type =...	Yes	-	Ignored	Will always be "net_list"
PRICE_AMOUNT	Yes	-	Ignored	Will always be 0
PRICE_CURRENCY	No	-	Ignored	Not relevant
TAX	No	-	Ignored	Not relevant
PRICE_FACTOR	No	-	Ignored	Not relevant
LOWER_BOUND	No	-	Ignored	Not relevant
TERRITORY	No	-	Ignored	Not relevant
MIME_INFO	++Yes	-	EFObasen will require a product image, and hence MIME information must be supplied	-
MIME	Yes	-	-	-
MIME_TYPE	+Yes	MIME type		
MIME_SOURCE	Yes	Filnavn		
MIME_DESCR	No	-		
MIME_ALT	No	Beskrivelse	Optional image/document name	Optional image/document name
MIME_PURPOSE	+Yes	-		
USER_DEFINED_EXTENSIONS	+Yes	-	-	-
UDX.EDXF.MANUFACTURER_ACRONYM	No	-	Ignored	Not relevant
UDX.EDXF.DESCRPTION_VERY_SHORT	No	Varebetegnelse		
UDX.EDXF.TENDER_TEXT	No	-	Ignored	Not relevant
UDX.EDXF.VALID_FROM	No	Gyldig fra	If a valid date is provided, then EFObasen will automatically activate this product at the provided date. The product will be entered into an approval status. Note: The product will only change status automatically if the product validates according to the EFO validation rules.	
UDX.EDXF.EXPIRATION_DATE	No	Utløpsdato	If a valid date is provided, then EFObasen will automatically change the products availability to "Unavailable" at the provided date.	
UDX.EDXF.DISCOUNT_GROUP	No	-	-	-
UDX.EDXF.DISCOUNT_GROUP_MANUFACTURE	No	-	Ignored	Not relevant
UDX.EDXF.DISCOUNT_GROUP_SUPPLIER	No	-	Ignored	Not relevant
UDX.EDXF.BONUS_GROUP_SUPPLIER	No	-	Ignored	Not relevant
UDX.EDXF.PKWIU	No	-	Ignored	Not relevant

UDX.EDXF.DECLARATION	No	-	Must have the save value as the MIME_SOURCE element of the document that is being described	Will have the save value as the MIME_SOURCE element of the document that is being described
UDX.EDXF.DECLARATION type	+Yes	Deklarasjonstype		
UDX.EDXF.DECLARATION date	+Yes	Deklarasjonsdato		
UDX.EDXF.ADDITIONAL_FACTORS	No	-	-	Not relevant
UDX.EDXF.ADDITIONAL_PRICE_FACTOR	+Yes	-	Ignored	Not relevant
UDX.EDXF.ADDITIONAL_FACTOR_INFO	+Yes	-	Ignored	Not relevant
UDX.EDXF.PRODUCT_TO_STOCK	No	Lagerføres		
UDX.EDXF.PRODUCT_SERIES	No	Produktserie		
UDX.EDXF.PRODUCT_VARIATION	No	Produktvariant		
UDX.EDXF.AT.REVERSE_CHARGE_INFO	No	-	Ignored	Not relevant
UDX.EDXF.COUNTRY_BRANCH_NUMBERS	++Yes	-	-	-
UDX.EDXF.COUNTRY_BRANCH_NUMBER	+Yes	Enummer		
industry=...	+Yes	-	Must always be "electrical"	Will always be "electrical"
country=...	+Yes	-	Must always be "NO". Branch numbers from other countries may be supplied, but may not be used to identify or create new products	Will always be "NO"
UDX.EDXF.COUNTRY_BRANCH_SUPPLIER_IDS	++Yes	-	-	-
UDX.EDXF.COUNTRY_BRANCH_SUPPLIER_ID	+Yes	EFO supplier ID		
industry=...	+Yes	-	Must always be "electrical"	Will always be "electrical"
country=...	+Yes	-	Must always be "NO"	Will always be "NO"
UDX.EDXF.PACKING_UNITS	No	-	-	-
UDX.EDXF.PACKING_UNIT	+Yes	-	-	-
UDX.EDXF.QUANTITY_MIN	+Yes	Antall		
UDX.EDXF.QUANTITY_MAX	No	-	Ignored	Not relevant
UDX.EDXF.PACKING_UNIT_CODE	+Yes	Enhet		
UDX.EDXF.PACKING_UNIT_NAME	+Yes	-	Must be "f-pak", "m-pak", "d-pak" or "t-pak"	Will be "f-pak", "m-pak", "d-pak" or "t-pak"
UDX.EDXF.PACKAGE_BREAK	No	Forpakning kan brytes		
UDX.EDXF.VOLUME	No	Volum		
UDX.EDXF.WEIGHT	No	Vekt		
UDX.EDXF.LENGTH	No	Lengde		
UDX.EDXF.WIDTH	No	Bredde		
UDX.EDXF.DEPTH	No	Høyde/dybde		
UDX.EDXF.DIAMETER	No	Diameter		

UDX.EDXF.GTIN	+Yes	GTIN		
UDX.EDXF.GS1_128	No	GS1 128		
UDX.EDXF.PRODUCT_LOGISTIC_DETAILS	No	-	-	-
UDX.EDXF.NETWEIGHT	No	Nettvekt		
UDX.EDXF.REGION_OF_ORIGIN	No	Opprinnelsesregion		
UDX.EDXF.REACH	No	-	-	-
UDX.EDXF.REACH.LIST_DATE	No	REACH dato		
UDX.EDXF.REACH.INFO	+Yes	REACH		
UDX.EDXF.SURCHARGE_LIST	No	-	-	-
UDX.EDXF.SURCHARGE	+Yes	-	-	-
UDX.EDXF.SURCHARGE_TYPE	+Yes	-	Ignored	Not relevant
UDX.EDXF.SURCHARGE_MANNER	+Yes	-	Ignored	Not relevant
UDX.EDXF.SURCHARGE_PERCENTAGE	+Yes	-	Ignored	Not relevant
UDX.EDXF.SURCHARGE_PRICE_AMOUNT	+Yes	-	Ignored	Not relevant
UDX.EDXF.SURCHARGE_CALCULATION	No	-	Ignored	Not relevant
UDX.EDXF.MATERIAL_BASIS	No	-	Ignored	Not relevant
UDX.EDXF.MATERIAL_BASIS_WEIGHT	No	-	Ignored	Not relevant
UDX.EDXF.MATERIAL_BASIS_SURCHARGE_T	No	-	Ignored	Not relevant
HRESHOLD				
UDX.EDXF.MATERIAL_BASIS_SURCHARGE_S	No	-	Ignored	Not relevant
HUTTER				
UDX.EDXF.MATERIAL_BASIS_SURCHARGE_C	No	-	Ignored	Not relevant
REDIT				
UDX.EDXF.MATERIAL_BASIS_SURCHARGE_T	No	-	Ignored	Not relevant
ABLE				
PRODUCT_REFERENCE	No	-	-	-
PRODUCT_REFERENCE type	Yes	-		
PRODUCT_REFERENCE quantity	No	-		
PROD_ID_TO	Yes	-	Only Elnummer may be used as a reference	Elnummer is used to reference products
CATALOG_ID	No	-	Ignored	Not relevant
CATALOG_VERSION	No	-	Ignored	Not relevant
PRODUCT_LOGISTIC_DETAILS	No	-	-	-
CUSTOMS_TARIFF_NUMBER	No	-	-	-
CUSTOMS_NUMBER	+Yes	Tolltariffnummer		
STATISTICS_FACTOR	No	Statistikkfaktor		
COUNTRY_OF_ORIGIN	No	Opprinnelsesland		
PRODUCT_DIMENSIONS	No	-	-	-
VOLUME	No	Volum		

WEIGHT	No	Vekt	
LENGTH	No	Lengde	
WIDTH	No	Bredde	
DEPTH	No	Høyde/dybde	

f. Properties and classification specific to EFObasen

Any product feature not conveyed through BMEcat nor through the ETIM standard, will be transmitted in a separate reference feature system element. This element will include the generic "EFO-Klasse" identifier. Since the "EFO-Klasse" ID is mapped to an ETIM class ID internally in EFObasen, a supplier must take care to ensure that the correct "EFO-Klasse" ID is supplied when transmitting this information. The mapping also implies that this reference feature system is not mandatory (as EFObasen can derive the "EFO-Klasse" from the ETIM class), unless EFO at any given time marks a property not covered by ETIM and BMEcat as mandatory.

T_NEW_CATALOG → PRODUCT → PRODUCT_FEATURES						
This element is provided in addition to the element containing ETIM classification and features						
Classification	REFERENCE_FEATURE_SYSTEM_NAME	+Mandatory	Singel	The format must be "EFO-X.X", where X.X denotes the major and minor version of the EFO class being transmitted. Example "EFO-1.0"	dtSTRING	80
EFO-Klasse	REFERENCE_FEATURE_GROUP_ID	+ Mandatory	Singel	EFO class identifier (8 digits)	dtMLSTRING	60
T_NEW_CATALOG → PRODUCT → PRODUCT_FEATURES → FEATURE						
Feature name	FNAME	Mandatory	Singel	A unique identifier of the property being transmitted. See point g. for a list of possible values	dtMLSTRING	60
Feature value	FVALUE	Mandatory	Fler	Feature value	dtMLSTRING	60
Unit	FUNIT	Optional	Singel	Unit for the feature value. The unit format follows the BMEcat specification. If the provided unit does not match the unit in EFObasen, the value is attempted converted into the correct unit. See point g. for a list of supported property units	dtSTRING	20
Additional feature information	FVALUE_DETAILS	Optional	Singel	This field is used in those instances where the feature value exceeds the allotted 60 characters allowed in FVALUE. Any value provided here will be concatenated with FVALUE	dtMLSTRING	250

g. EFO specific property identifiers

The following table lists the possible properties that may be provided using the generic EFObasen reference feature system element.

Note: Names are listed in Norwegian as they appear in EFObasen.

Feature ID	Feature group	Feature name	Data type	Unit
9548fa73-1a87-4861-bec6-acf05eebcf7c	Lenker	Produsent(er)	string	
bef1514c-c819-4ec0-8994-89acdd5b6d3a	Lenker	Sertifikat	string	

235f24e7-7449-4282-b16f-c165b4f281eb	Logistikkdata	Bredde	double	MMT (Millimeter)
646a4784-5a2f-4687-96f1-25742779d193	Logistikkdata	Høyde/diameter	double	MMT (Millimeter)
2debdabf-9653-4bf2-b582-cec4edadeaeb	Logistikkdata	Lengde	double	MMT (Millimeter)
89b3124a-d4a8-4d4a-a7c9-960a4fb12cfd	Logistikkdata	Vekt	double	GRM (Gram)
228d196c-8744-4a32-8d3e-41841fb01df8	Taksonomi	EFO Blokknummer	int	
31bdc264-4c32-497b-b422-9887a9ebe890	Taksonomi	NOBB varegruppe	int	
2884e659-457e-4243-9c0a-e1f99ef78be8	Taksonomi	NRF varegruppe	int	
57d53828-59b3-4af0-9eba-913e3db6f787	Vareidentifikasjon	Engelsk teknisk beskrivelse	string	
b3ec9edd-9eef-434f-ac7b-f4bdd2a7f4c2	Vareidentifikasjon	Engelsk varebetegnelse	string	
bc47bc3d-71e2-43fa-8874-1e3d3dfaed04	Vareidentifikasjon	Engelsk varettekst	string	
631b2df9-64d5-46a4-ad7e-b578759ac921	Vareidentifikasjon	Leverandørens overskrift	string	
3d5f597f-1845-48de-a154-c031e8746d36	Vareidentifikasjon	NOBB nummer	int	
28b82501-8ebe-412f-ad50-c54fc808f54f	Vareidentifikasjon	NRF nummer	int	
c2f3119d-5097-4fb7-b018-760a015c1da4	Vareidentifikasjon	Produkt ID	string	
b2e8f326-f906-43c9-b837-15aa2a7f7e37	Vareidentifikasjon	Produkt URL	string	
fccf79b2-abd1-4f6d-8c2f-65b389171f36	Vareidentifikasjon	Produktnavn	string	
1289fd92-fc6c-4e27-9128-64169c4aaae1	Vareidentifikasjon	UNSPSC	string	