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# **Boligmappa Web Service Technical Documentation**

**Version 1.45**

## Version History

Version	Date	Description
1.0	18.06.2012	Changed document structure and added modifications done to web methods
1.1	27.06.2012	Implemented exception/error handling in LookupMatrikkelByPostalAddress web method. Introduced new exception code 100.
1.2	03.08.2012	Created new web service operation 'GetPropertyAndPlantInfoByBoligmappa' to retrieve Property/Plant Info by Boligmappa Number Updated SendDocument and LookupMatrikkelByPostalAddress.
1.3	04.09.2012	Added 'ApplicationTag' return parameter in GetDocumentsByPlantId web operation
1.6	03.12.2012	Added information about SendDocuments and GetPropertyAndPlantInfoByMatrikkel
1.7	17.06.2013	Added StreetName, HouseNumber, HouseSubNumber, PostalCode and PostalPlace parameters to the LookupMatrikkelByPostalAddress web method
1.8	01.08.2013	Added Information about DeleteDocuments web method
1.9	14.08.2013	Removed 128 error code and added 129 error code to the exception list
1.10	16.08.2013	Updated the contact details. Updated the inputs for LookupMatrikkelByPostalAddress.
1.11	18.09.2013	Reviewed and updated as per the latest modifications to the API
1.12	21.11.2013	Reviewed and updated
1.13	28.11.2013	Added documentation for GetDocumentById web method
1.14	05.12.2013	Updated SendDocument and SendDocuments web methods
1.15	11.12.2013	Added Document url validation scenarios for SendDocument(s) web methods
1.16	12.12.2013	Added ApplicationName validation
1.17	13.12.2013	Added new user scenarios
1.18	26.12.2013	Added new Document Type ids & new professions
1.19	21.01.2014	Introduced new error code
1.20	27.02.2014	Revised the Document Type Ids and Profession Ids
1.21	17.06.2014	Updated with new EFO related web methods
1.22	19.06.2014	Reviewed and updated
1.23	09.07.2014	Added documentation for GetAllPropertyAndPlantInfo web method
1.24	10.07.2014	Changed GenerateDocumentTemplate to CombineEfoDocuments and modified accordingly
1.25	21.07.2014	Added documentation for EditJobDocumentChapterTwo and EditJobDocumentChapterThree methods.
1.26	21.07.2014	Updated document with SendNoteToPlant web method
1.27	15.08.2014	Upgraded the web service document

1.28	30.09.2014	Updated document with the GetDocumentationByMatrikkel web method
1.29	15.10.2014	Updated document with the GetDocumentationForHousingCorpShare And IsPropertyExistingInBoligmappa web methods
1.30	27.10.2014	Updated document with the CreatePlantByMatrikkel web method Added 172 error code to the exception list Removed 137 (Given Url does not contain data) error code Introduced 174 (Provided Boligmappa Document id is invalid) error code
1.31	13.11.2014	Added 146(The application name is not set) error code for the following web methods that was missing <ul style="list-style-type: none"> <li>- SendNoteToPlant</li> <li>- SendDocument</li> <li>- SendDocuments</li> </ul>
1.32	15.01.2015	Changes to the DocumentTypeIds. Added: 23, Removed: 12.
1.33	05.02.2015	Added 2 new document types. 24 - NS3600, 25 - Kursfortegnelse
1.38	25.02.2015	Modified GetDevices web method
1.39	26.02.2015	Modified GetRoomsInformation web method
1.40	27.02.2015	Modified SendDocument and SendDocuments web methods
1.41	09.03.2015	Added documentation for GetDocumentationByBoligmappaNumber and GetPropertyAndBuildingDetails web methods
1.42	25.03.2015	Removed the following web methods <ul style="list-style-type: none"> <li>- GetRoomsInformation</li> <li>- GetDevices</li> </ul> Removed any redundant data models and exceptions Updated GetPropertyAndBuildingDetails web method
1.43	10.04.2015	Added GetFileTypes web method Fixed issues in exceptions listed in each web method
1.44	15.05.2015	Modified the GenerateJobDocument web method
1.45	19.06.2015	Introduced 222 (No Documents found for the given housing cooperative share) error code
1.46	20.10.2015	Introduce 276 error code (Given matrikkel does not support in boligmappa API 1.0 as it contains multiple properties. Please use Boligmappa API 2.0 or Boligmappa Bedrift)

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## **Purpose**

This document describes the boligmappa web service interface operations, and how to use them in order to integrate an application with the bedrift boligmappa system. It describes what the boligmappa web service is, what is required to use it, how to make requests, and how to process the response. This document is a primary guideline when implementing the boligmappa web service.

## **Audience**

The intended reader of this document is anyone who wishes to integrate their application with the boligmappa web service.

# 1. Introduction

## 1.1. Background

As part of the boligmappa solution, a web service interface is provided in order for third party applications to integrate with boligmappa bedrift.

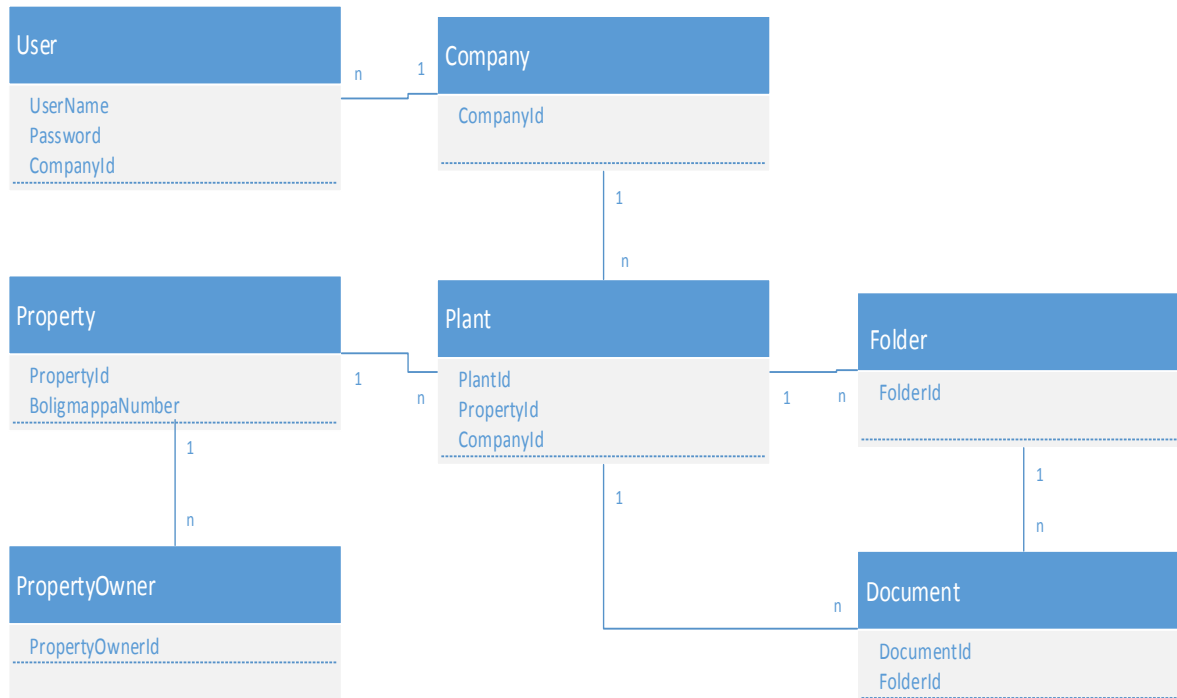
Following web service operations are provided under Boligmappa web service.

- LookupMatrikkelByPostalAddress
- GetPropertyAndPlantInfoByMatrikkel
- GetPropertyAndPlantInfoByEdok
- GetAllPropertyAndPlantInfo
- CreatePlantByMatrikkel
- CreatePlantByEdok
- SendNoteToPlant
- SendDocument
- SendDocuments
- GetDocumentsByPlantId
- GetDocumentById
- DeleteDocuments
- GetEfoItemInfo
- CombineEfoDocuments
- ReportMissingSpecification
- GenerateJobDocument
- EditJobDocumentChapterTwo
- EditJobDocumentChapterThree
- GetDocumentationByBoligmappaNumber **[New]**
- GetDocumentationByMatrikkel
- GetDocumentationForHousingCorpShare
- IsPropertyExistingInBoligmappa
- GetPropertyAndBuildingDetails **[New]**
- GetFileTypes



## 1.2. Concepts and Definitions

Technical terms and concepts used in the boligmappa system and the web service operations are explained in this section, in order for a better understanding when integrating with the web service.



<b>User</b>	A web service user registered in Boligmappa system
<b>Property</b>	A Property is as defined in 'Grunnboka', with matrikkel-information (K/G/B/F/S)-number. If the property is a housing co-operative, it can be defined by the combination of matrikkel information and Lnr (ShareID/andelsnummer).
<b>Plant</b>	Plant is an instance of a property specific for a company. More than one company may map to the same property, and the plant represents the property for a specific company, differentiating with other plants (in other companies) mapping to the same property. Access to plant information is limited to the users in the company linked to the plant.
<b>Folder</b>	A folder is a method of structuring documents within a plant. The concept of Folder tries to organize the documents in a plant by simulating a folder/directory structure hierarchy that is mapped in the database, and not in a physical server directory structure.
<b>Boligmappa Number</b>	Every property in boligmappa has a unique boligmappa number. This number is created by the boligmappa system for a property, when the

	property is added to the system. The unique boligmappa number is used in the system to map the property with other entities such as Property owners and Plants. <i>(The term 'Edok Number' which has been used in some web methods is identical to 'Boligmappa Number'.)</i>
<b>Document</b>	Documents Can either be connected directly to a plant or a folder
<b>Property Owner</b>	Owners of the property

### 1.3. Sample Use Cases

#### Scenario 1: Uploading a document to a Plant

A typical use case for a third party application using the web service for uploading a document to a plant would have a workflow as follows.

- Lookup a property,  
*Based on address/name-info available in the third party application*
  - If the web method LookupMatrikkelByPostalAddress return 0 results, the address/name-info provided by the third party app needs to be verified/corrected. We have also seen examples where lack of consistency in Infoland records may result in 0 records returned even if the input is correct.
  - If more than 1 result is returned, the third party application will typically present the list to the user and have the user select the correct record.

*Based on matrikkel information available in the third party application*

- If address information is not available for a given property and if matrikkel information is available GetPropertyAndPlantInfoByMatrikkel web method can be used to retrieve the property information

*Based on Boligmappa number*

- If the Boligmappa Number of the property is available in the third part application, GetPropertyAndPlantInfoByEdok web method can be used to lookup the property

*When looking for an already existing plant*

- If Boligmappa number, matrikkel and address is not available and if a user is looking for an already created plant by his company GetAllPropertyAndPlantInfo web method can be

used. GetAllPropertyAndPlantInfo returns property and plant information of all the plants created by the company of authenticated user.

- Create a Plant in the Boligmappa system using the information returned from the LookupMatrikkelByPostalAddress service
  - Use CreatePlantByEdok to create a Plant, sending the boligmappa number as the input parameter, or
  - Use CreatePlantByMatrikkel to create a Plant, sending the Matrikkel information as the input parameter.
- Submit document(s) for the selected plant by using web service operation SendDocument or SendDocuments. Use information returned from LookupMatrikkelByPostalAddress, CreatePlantByBoligmappa or CreatePlantByMatrikkel as input to SendDocument in order to link the document to the correct property. If the property does not exist with plant in Boligmappa, or the input parameter details are incorrect, then SendDocument will throw an error.

**IMPORTANT:** The Boligmappa number is returned by LookupMatrikkelByPostalAddress and CreatePlantByMatrikkel. We recommend that third party applications store this in their database for future use when sending documents etc. to the same property.

## Scenario 2: Sending a Job Note

Some professionals don't have documents associated with their each and every job. In such situations professionals don't have a proper way to track all the small jobs done by them. Furthermore there is no way to update property owners about these jobs.

SendNoteToPlant web method addresses this problem and can be used to send a note about the each and every job done by a professional to the associated plant. A PDF document will be created with the job description and other information provided by the professional and will be attached to the relevant plant. Professional can make this document visible to property owner in Boligmappa if needed.

If you have a job description adding section in your ERP system, it is the best place to include this 'Sending a Job Note' feature.

## Scenario 3: Several companies are working on the same property

- The Property with address Rosenlundveien 20 B, 3150 Tolvsrød, is owned by Per-Christian Svendsen, and has Boligmappa number AAA5296.
- Both companies Pettersens elektriske AS and Oslo Rør AS are doing a job on this property.
- They each create a Plant by using CreatePlantByBoligmappa web service operation, with the Boligmappa number they received from their customer as input. This results in two plants being created in the system, one for each company, but they are both connected to the same property with the unique Boligmappa number.
- The user at Pettersen Elektriske AS creates this plant using system ABC:

- When any user belonging to Pettersen Elektriske is submitting a document with SendDocumet/SendDocumets web service operation, the document will be linked to the plant created for Pettersen Elektriske.
- When a user belonging to Oslo Rør is submitting a document, the document will be linked to the plant created for Oslo Rør.

#### **Scenario 4: Get correct owner and address information in the ERP system**

When creating a new order or a new customer in the ERP system, our web service can be used as a lookup service to ensure that the information typed in by the user is correct and valid.

- LookupMatrikkelByPostalAddress
- GetPropertyAndPlantInfoByMatrikkel
- GetPropertyAndPlantInfoByEdok

Information about the property and owner, delivered through above web services can be displayed to the user so that they can choose the correct information. And that information can be stored in the ERP system.

Furthermore, the valid information provided through our web methods can be used to validate and update your existing customer database or to avoid duplicates.

#### **Scenario 5: Show all orders connected to one unique address.**

Suppose a User need to find a list of orders connected to a specific address over the time. Nowadays, in most ERP systems this is a challenging task. The address model used in most ERP systems consists of street address, house number and house sub number only. This model is failed to provide a unique address to the properties like Housing coop shares and sectioned houses.

But in Boligmappa web service we are dealing with unique matrikkel values. With the information provided by us, the address is unique all the way to the 'end apartment'. By performing a property search based on the address, any property can be uniquely identified and all the orders connected to a unique address can be displayed simply.

#### **Scenario 6: All documents published to one unique address**

GetDocumentsByPlantId web method can be used to get all the documents published on one unique address! Documents uploaded by PDA, ERP, connected to different owners or the orders in the past can be retrieved through this web method. This is a great way to show order and documents history on a unique address.

#### **Scenario 7: Create several plants at one time**

In some cases, users have to deal with many apartments in a housing cooperative. Let's say a company gets an order to renovate 180 apartments in one housing cooperative.

In such a case, `LookupMatrikkelByPostalAddress` can be used to get all the matrikkels and owner information of that particular housing corporative. This information can be stored locally in your system and then `CreatePlantByMatrikkel` web method can be called whenever needed, for each apartment to create plants. Once property information of all the housing cooperative shares are saved locally it is not required to call `LookupMatrikkelByPostalAddress` again and again when creating plants.

### **Scenario 8: Creating and editing a job document**

`GenerateJobDocument` method can be used to generate a job document for a plant by attaching the related EFO documents. As described in section 3.17, the job document contains six main sections, namely, Cover Page, Company details page, Contents Page, Chapter 1, Chapter 2 and Chapter 3. The user should call the `GenerateJobDocument` method by providing inputs for chapter 2 and 3. The input for chapter 2 is optional, and the users may provide a document as a base 64 encoded string or via a URL. For chapter 3, the users can provide a list of EFO Ids, a base 64 encoded document, or a URL.

The documents provided as a URL or a base 64 encoded string could be of any common document format such as PDF, Word documents, Excel sheets, images etc. The Boligmappa system will attempt to identify the input file type and convert it to PDF.

The `GenerateJobDocument` method will output a URL which can be used to download the generated document. The generated document will also be attached to the given plant, and the Boligmappa document id of the document will also be returned as a part of the output.

The users can use `EditJobDocumentChapterTwo` and `EditJobDocumentChapterThree` methods to edit the chapter 2 and 3 sections of a previously generated job document. Both methods provide the option to either append documents to a chapter, or overwrite the existing chapter with the new document. These methods takes a public URL or a base 64 encoded document as input. Additionally `EditJobDocumentChapterThree` methods accepts a list of EFO ids as well. If the input to the job document provided by the Boligmappa doc id or a Boligmappa URL, the existing document in the system will be updated, otherwise a new job document, with a new Boligmappa doc id will be generated.

### **Scenario 9 – Sync property details among several applications**

Suppose that a user of a given company has created a plant for a particular property using a one ERP system called ABC. Users of this company has also created plants using another application called XYZ. If users of ABC ERP system want to access the plants created using XYZ application they can use `GetAllPropertyAndPlantInfo` web method.

`GetAllPropertyAndPlantInfo` web method returns a list of all the plants created by a particular company using several applications.

## 2. Getting Started

### 2.1. Test Server Details

The server URL that the web service client needs to connect to is as follows:

<http://webservice.boligmappa.99x.no/Edokwebservice.asmx>

**NOTE:** For .Net applications/Clients, the SVCUTIL tool can be used to generate the proxy classes for the web service client by specifying the above URL.

### 2.2. Getting a User Account

For testing purposes, the third party applications will need a valid username and password for authentication when using the web service operations. Please request a test username and password for the staging server by contacting the following email recipients:

- [per.svendsen@edok.no](mailto:per.svendsen@edok.no)
- [sameerag@99x.lk](mailto:sameerag@99x.lk)

### 2.3. Authentication

In order to use the web service operations, each call to a web service method should contain the username and password provided as parameters. The username and password should belong to a valid user in the boligmappa bedrift system in order to successfully be authenticated.

Another important consideration is that most of the operations will be restricted to the company that the given user (username and password) belongs to.

## 3. Web Services

### 3.1. LookupMatrikkelByPostalAddress

#### 3.1.1. Description

Retrieves matrikkel information by providing the street address of a property.

The method looks up existing matrikkel information from Boligmappa database and if no results are found, extends the search to Infoland service. Results will include matrikkel and address information as well as owner information. Results will be presented as lists.

#### *Address list in Norway* New

There can be situations where no results are found due to a spelling mistake of the input street address. To reduce these kind of issues which may conflict users a solution like address auto suggesting can be implemented. If you are interested in implementing such a solution to your application you may download the list of all existing addresses in Norway hosted [here](#).

#### 3.1.2. Request

Following inputs need to be provided along with the user credentials to use the webservice.

Parameter	Type	Mandatory/Optional	Comments
postalCode	string	Mandatory	Postal code
streetAddress	string	Mandatory	E.g: Jomfrustien 10A
municipalityNumber	int	Optional	Municipality Number
firstName	string	Optional	First name of the property owner (Obsolete – will be removed in future version of web service)
lastName	string	Optional	Last name of the property owner (Obsolete – will be removed in future version of web service)

#### Notes:

- If all five parameters are provided, search will be based on all parameters.
- MunicipalityNumber is an optional parameter. If it is provided, the given value will be used, but if it is not provided (i.e. value is 0), then the system will resolve the municipality number by the given postal number.
- If only postal code and street address is provided, search will be based on those two elements and municipality number.

### 3.1.3. Response

Returns a List of MatrikkelDataModel if the request executed successfully

Property	Type	Description
matrikkels	List< <a href="#">MatrikkelReturnModel</a> >	List of MatrikkelReturnModel

### 3.1.4. Exceptions

Error code	Description
101	Postal number does not exist in system
102	The street address cannot be null or empty
103	Invalid street address format
104	Infoland error or infoland service unavailability
110	Input parameters contain null or invalid data
123	An exception occurred while processing your request
127	Postal code does not exist in the specified municipality
129	Infoland failed to return matrikkels for housing corporative shares
139	Current version of Boligmappa does not support these type of properties (aksje/obligasjonsleiligheter)
167	You are not authorized to use this web method

## 3.2. GetPropertyAndPlantInfoByMatrikkel

### 3.2.1. Description

This method returns property and plant information (as described in the outputs below) when the Matrikkel values are provided as the input.

### 3.2.2. Request

Parameter	Type	Mandatory/Optional	Comments
Knr	int	Mandatory	Knr
Gnr	int	Mandatory	Gnr
Bnr	int	Mandatory	Bnr
Fnr	int	Optional	Fnr
Snr	int	Optional	Section number for sections properties
Lnr	int	Optional	Share ID for housing cooperatives

### 3.2.3. Response

Property	Type	Description
Property	<a href="#">PropertyAndPlantInfoByMatrikkelModel</a>	property and plant Info associated with the boligmappa number



## Notes:

- If the specific company has no plant tied to the property associated with the given matrikkel values, only property details will be returned and Plant related data will be null.
- If the searched property does not already exist in Boligmappa database then property details will be retrieved from Infoland. For this case, boligmappa number will be null.

### 3.2.4. Exceptions

Error code	Description
104	Infoland is not available
109	Given Matrikkel does not exist
110	Input parameters contain null or invalid data
117	Provided Snr is not valid
118	Snr is not provided with the input matrikkel. But given is a sectioned property
119	Snr is provided with the input matrikkel. But given is not a sectioned property
120	Provided Lnr is not valid
121	Lnr is not provided with the input matrikkel. But given is a housing corporative share
122	Lnr is provided with the input matrikkel. But given is not a housing corporative share
123	An exception occurred while processing your request
131	This type of property is not supported
167	You are not authorized to use this web method
276	Given matrikkel does not support in boligmappa API 1.0 as it contains multiple properties. Please use Boligmappa API 2.0 or Boligmappa Bedrift

## 3.3. GetPropertyAndPlantInfoByEdok

### 3.3.1. Description

This method returns property and plant information (as described in the outputs below) when the boligmappa number is provided as the input.

### 3.3.2. Request

Parameter	Type	Mandatory/Optional	Comments
edokNumber	string	Mandatory	The boligmappa number of the property

### 3.3.3. Response

Property	Type	Description
----------	------	-------------

Property	<a href="#">PropertyAndPlantInfoModel</a>	property and plant Info associated with the boligmappa number
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**Notes:**

- If the specific company has no plant tied to the property associated with the given boligmappa number, only property details will be returned and Plant related data will be null.

### 3.3.4. Exceptions

Error Code	Description
106	Boligmappa Number does not exist in system
110	Input parameters contain null or invalid data
123	An exception occurred while processing your request
167	You are not authorized to use this web method

## 3.4. GetAllPropertyAndPlantInfo

### 3.4.1. Description

This method returns property and plant information (as described in the outputs below) of all the plants that are created by the current authenticated user's company.

**Notes:**

If a particular company has created a large number of plants, then the output of this method will be large. Please note that there can be receiving byte limitations of your API testing client and if the size of the response exceeds that limit an error can be thrown.

### 3.4.2. Request

Parameter	Type	Mandatory/Optional	Comments
applicationName	string	Mandatory	Third party application identifier, identifying the client consuming the web service – (Length of the ApplicationName should be less than or equal to 10)

### 3.4.3. Response

Property	Type	Description
Property	List< <a href="#">PropertyAndPlantInfoModel</a> >	List of property and plant Info

**Notes:**

- If the specific plant is not tied to a property, only plant details (plantId and plantName) will be returned and Property related data will be null/empty.

### 3.4.4. Exceptions

Error code	Description
123	An exception occurred while processing your request
146	The application name is not set
167	You are not authorized to use this web method

## 3.5. CreatePlantByMatrikkel

### 3.5.1. Description

CreatePlantByMatrikkel web method is used for creating a Plant in the system by providing matrikkel information.

### 3.5.2. Request

Parameter	Type	Mandatory/Optional	Comments
Knr	Int	Mandatory	Knr
Gnr	Int	Mandatory	Gnr
Bnr	Int	Mandatory	Bnr
Fnr	Int	Mandatory	Fnr
Snr	Int	Mandatory	Snr-Section number for sectioned properties
Lnr	Int	Mandatory	Share ID for housing co-operatives
customerName	string	Mandatory	Name of customer for the plant. (Length of the CustomerName must be less than or equal to 100)
applicationName	string	Mandatory	Third party application identifier, identifying the client consuming the web service. (Length of the ApplicationName should be less than or equal to 10)

#### Notes:

- Web service client should have valid Matrikkel values to use this web method. Matrikkel Information of a property can be retrieved by using an appropriate web method of boligmappa web service.
- If the provided property is not registered in Boligmappa, the property information will be retrieved from infoland and the property will be automatically registered in Boligmappa. Then the plant will be created for that property.

### 3.5.3. Response

CreatePlantByMatrikkel web method will create the Plant in the system, and return Following properties back to the client.

Property	Type	Description
Property	<a href="#">MatrikkelPlantInfo</a>	Model containing the details of the created plant

### 3.5.4. Exceptions

Error code	Description
105	Plant already exists in system
107	Plant creation failed due to internal error
109	Given Matrikkel does not exist in system
110	Input parameters contain null or invalid data
117	Provided Snr is not valid
118	Snr is not provided with the input matrikkel. But given is a sectioned property
119	Snr is provided with the input matrikkel. But given is not a sectioned property
120	Provided Lnr is not valid
121	Lnr is not provided with the input matrikkel. But given is a housing corporative share
122	Lnr is provided with the input matrikkel. But given is not a housing corporative share
123	An exception occurred while processing your request
131	This type of property is not supported
138	ApplicationName length is exceeded maximum allowed character limit (10)
146	The application name is not set
167	You are not authorized to use this web method
172	CustomerName length is exceeded maximum allowed character limit (100)
276	Given matrikkel does not support in boligmappa API 1.0 as it contains multiple properties. Please use Boligmappa API 2.0 or Boligmappa Bedrift

## 3.6. CreatePlantByEdok

### 3.6.1. Description

CreatePlantByEdok web method is used for creating a Plant in the system, by providing the boligmappa number.

### 3.6.2. Request

Parameter	Value	Mandatory/Optional	Comments
edok	string	Mandatory	Boligmappa number
customerName	string	Mandatory	Name of the customer for the plant (property owner)
applicationName	string	Mandatory	Third party application identifier, identifying the client consuming the web service. (Length of the ApplicationName should be less than or equal to 10)

#### Notes:

- Web service client should have a valid boligmappa number to use this web method. Boligmappa number for a property can be retrieved by using an appropriate web method of boligmappa web service.

#### 3.6.3. Response

The CreatePlantByEdok web method will create the Plant in the system, and return the following properties back to the client.

Property	Type	Description
Property	<a href="#">EdokPlantInfo</a>	Model containing the results of the created plant

#### 3.6.4. Exceptions

Error Code	Description
105	Plant already exists in system
106	Boligmappa Number does not exist in system
110	Input parameters contain null or invalid data
123	An exception occurred while processing your request
138	ApplicationName length is exceeded maximum allowed character limit (10)
146	The application name is not set
167	You are not authorized to use this web method

## 3.7. SendNoteToPlant

### 3.7.1. Description

This method generates a PDF document with the given information and associate it to the specified plant.

### 3.7.2. Request

Parameter	Type	Mandatory/Optional	Comments
plantId	long	Mandatory	Id of the plant to which the note should be associated
jobDescription	string	Mandatory	A small description about the job, maximum character limit is 500
jobStartDate	DateTime	Mandatory	Start date of the job
jobEndDate	DateTime	Mandatory	End date of the job
fileName	string	Optional	Name of the generated file. Default name is 'Melding om utført arbeid ' *
orderNumber	string	Optional	Order number
showInBoligmappa	Boolean	Mandatory	Indicate whether to make the note visible in Boligmappa or not. Default is false
applicationName	string	Mandatory	Third party application identifier, identifying the client consuming the web service - (Length of the applicationName should be less than or equal to 10)

**Note:\***

If the request is sent without a File name “Melding om utført arbeid” will be set as the default file name. You may choose to use this file name or any other preferred default file name in your application UI to increase the user experience.

**3.7.3. Response**

Property	Type	Description
Document	<a href="#">JobNoteOutputModel</a>	A model containing the URL to the generated document and document Id.

**3.7.4. Exceptions**

Error code	Description
111	PlantId does not exist for your company
113	One or more mandatory fields have not been supplied as input
123	An exception occurred while processing your request
138	ApplicationName length is exceeded maximum allowed character limit (10)
146	ApplicationName is missing
161	Job description exceeded the maximum character limit of 500
167	You are not authorized to use this web method
175	The job end date needs to be later than the job start date

## 3.8. SendDocument

### 3.8.1. Description

SendDocument web method is used for submitting a one document to Boligmappa. The only difference between this web method and SendDocuments web method is the number of documents can be uploaded. The document is associated with a specific property and company through a plant ID. The company is given by the user credentials provided. It is possible to tag a document with related rooms and a device.

### 3.8.2. Request

Parameter	Type	Mandatory/Optional	Comments
plantId	long	Mandatory	Plant id of the plant to where the documents should be uploaded
applicationName	string	Mandatory	Third party application identifier, identifying the client consuming the web service - (Length of the applicationName should be less than or equal to 10)
documents	<a href="#">DocumentSendModel</a>	Mandatory	The document to be uploaded

#### Notes:

- Plant ID should be mandatorily provided; if plant does not exist the method will return an exception stating that the client has to create the Plant first using any of the two web service methods provided for Plant creation.

### 3.8.3. Response

When the document is uploaded successfully, a Document response model list is sent back to the client

Property	Type	Description
docuUploadStatuses	List< <a href="#">DocumentUploadStatus</a> >	Document response model List

### 3.8.4. Exceptions

Error code	Description
111	PlantId does not exist
112	There is no document to upload
113	One or more mandatory fields have not been supplied in input
114	Invalid file Name provided for document in FileName parameter
115	Given professionId(s) are not valid
116	Invalid document type ID
126	File extension not specified
133	Url or Data must be provided to create a document file
136	Provided Url is invalid
138	ApplicationName length is exceeded maximum allowed character limit (10)
146	ApplicationName is missing
165	The given profession is not registered to your company
167	You are not authorized to use this web method

### 3.9. SendDocuments

#### 3.9.1. Description

SendDocuments web method is used for submitting document(s) to Boligmappa. The document is associated with a specific property and company through a plant ID. The company is given by the user credentials provided. It is possible to tag a document with related rooms and a device.

#### 3.9.2. Request

Parameter	Type	Mandatory/Optional	Comments
plantId	long	Mandatory	Plant id of the plant to where the documents should be uploaded
applicationName	string	Mandatory	Third party application identifier, identifying the client consuming the web service. (Length of the ApplicationName should be less than or equal to 10)
documents	List< <a href="#">DocumentSendModel</a> >	Mandatory	List of documents to be uploaded

#### Notes:



Plant ID should be mandatorily provided; if plant does not exist the method will return an exception stating that the client has to create the Plant first using any of the two web service methods provided for Plant creation.

### 3.9.3. Response

When the documents are uploaded successfully, a Document response model List is sent back to the client.

Property	Type	Description
docuUploadStatuses	List< <a href="#">DocumentUploadStatus</a> >	Document response model List

### 3.9.4. Exceptions

Error code	Description
111	PlantId does not exist
112	There is no document to upload
113	One or more mandatory fields have not been supplied in input
114	Invalid file Name provided for document in FileName parameter
115	Given professionId(s) are not valid
116	Invalid document type ID
123	An exception occurred while processing your request
126	File extension not specified
133	Url or Data must be provided to create a document file
138	ApplicationName length is exceeded maximum allowed character limit (10)
146	The application name is not set
165	The given profession is not registered to your company
167	You are not authorized to use this web method

## 3.10. CombineFilesAndSendToPlant

### 3.10.1. Description

This web method can be used to send a set of files to a plant as a one combined PDF document. A PDF document will be created by combining the provided documents in the input and it will be attached to the specified plant.

### 3.10.2. Request

Parameter	Type	Mandatory/ Optional	Comments
-----------	------	------------------------	----------

plantId	long	Mandatory	Plant Id
documents	List< <a href="#">FileInputModel</a> >	Mandatory	The list of files to be combined
fileName	string	Optional	Name of the new document generated by combining the given documents. If not provided default name will be set to "Jobbdokumentasjon_+<Industry>".
orderNumber	String	Optional	Order for which the document associates with
showInBoligmappa	bool	Mandatory	Set whether this document is visible in boligmappa.no or not
applicationName	string	Mandatory	Third party application identifier, identifying the client consuming the web service – (Length of the applicationName should be less than or equal to 10)

#### Note:

When the fileName is not provided "Jobbdokumentasjon\_+<Industry>" will be used as the default file name. IndustryAssociation mapped with the profession of the authenticated user is used as the industry here. Ex: *Jobbdokumentasjon\_Elektriker.pdf*

#### 3.10.3. Response

Property	Type	Description
Document	<a href="#">CombinedFilesOutputModel</a>	A model containing the URL to the generated document, FileName and document Id.

#### 3.10.4. Exceptions

Error code	Description
111	PlantId does not exist for your company
123	An exception occurred while processing your request
138	ApplicationName length is exceeded maximum allowed character limit (10)
146	The application name is not set
157	Plant Id is required
162	No files provided to combine
163	An error occurred while combining the files

164	One or more of the input file models does not contain adequate information (a URL or Base64 encoded data)
167	You are not authorized to use this web method

## 3.11. GetDocumentsByPlantId

### 3.11.1. Description

This method returns a list of documents for a given plant in a company. The document list will contain all the documents for the Plant ID. The client also has option to provide the filtering criteria (not implemented yet) and choose whether to include sub folders in the results.

### 3.11.2. Request

Parameter	Type	Mandatory/Optional	Comments
plantId	long	Mandatory	Plant id
filterBy	string	Optional	Functionality not implemented in this version
includeSubFolders	bool	Mandatory	indicates whether to include documents of child folders of the queried plant as well

#### Notes:

- The provided plant ID should be belong to the same company as the user.

### 3.11.3. Response

Returns a list of DocumentModel.

Property	Type	Description
Documents	List< <a href="#">DocumentModel</a> >	List of documents for the given plant id

### 3.11.4. Exceptions

Error code	Description
111	PlantId does not exist for your company.
123	An exception occurred while processing your request
130	Input plant ID is either zero or negative. Please enter a positive value for the id
132	PlantId does not exists

167	You are not authorized to use this web method
-----	---

## 3.12. GetDocumentById

### 3.12.1. Description

This method returns a document for the given document id. An object of SingleDocumentModel is returned as the output.

### 3.12.2. Request

Parameter	Type	Mandatory/Optional	Comments
documentId	long	Mandatory	Document id of the document to be retrieved

### 3.12.3. Response

Property	Type	Description
Document	<a href="#">SingleDocumentModel</a>	Matching document to the given id

### 3.12.4. Exceptions

Error code	Description
123	An exception occurred while processing your request
134	Document does not exist for the given document id
135	User is not authorized to access the document with given document id
167	You are not authorized to use this web method

## 3.13. DeleteDocuments

### 3.13.1. Description

This method deactivates a provided list of documents and returns a list of DeleteDocumentModels as the output.

### 3.13.2. Request

Parameter	Type	Mandatory/Optional	Comments
DocumentIds	List<long>	Mandatory	List of document ids to be deleted

### 3.13.3. Response

Property	Type	Description
deletedDocuments	List< <a href="#">DeleteDocumentModel</a> >	List of deleted documents

### 3.13.4. Exceptions

No specific exceptions other than the general error exception.

Error code	Description
123	An exception occurred while processing your request
167	You are not authorized to use this web method

## 3.14. GetEfoItemInfo

### 3.14.1. Description

Gets the EFO document based on the provided EFO Id.

### 3.14.2. Request

Parameter	Type	Mandatory/Optional	Comments
efold	<a href="#">EfoldModel</a>	Mandatory	Model containing the data needed to find the EFO document

### 3.14.3. Response

Property	Type	Description
URL	string	A URL to the requested document

### 3.14.4. Exceptions

Error code	Description
123	An exception occurred while processing your request
142	One or more of the input EFO ids are invalid
147	The EFO id is not properly set

167	You are not authorized to use this web method
-----	---

## 3.15. CombineEfoDocuments

### 3.15.1. Description

This method generates a document combining all the EFO documents for the given EFO ids and returns a URL and Document ID.

### 3.15.2. Request

Parameter	Type	Mandatory/Optional	Comments
efolds	List< <a href="#">EfoldModel</a> >	Mandatory	Model containing the EFO ids for which the document has to be generated
documentName	String	Optional	Name of the document. If this field is not provided, a default name will be used.
applicationName	String	Mandatory	Third party application identifier, identifying the client consuming the web service – (Length of the applicationName should be less than or equal to 10)

### 3.15.3. Response

Property	Type	Description
Document	<a href="#">DocumentOutputModel</a>	A model containing the URL to the generated document, document Id and failed EFO Ids if there is any

### 3.15.4. Exceptions

Error code	Description
123	An exception occurred while processing your request
138	ApplicationName length is exceeded maximum allowed character limit (10)
140	Input Efold list is not set to a correct value

141	Input EfoId list is empty
146	The application name is not set
150	Could not find EFO documents for any of the EFO Ids provided
167	You are not authorized to use this web method

## 3.16. ReportMissingSpecification

### 3.16.1. Description

This method can be used to report about missing specifications to EFO. It returns a Boolean value indicating whether the report is sent successfully or not.

### 3.16.2. Request

Parameter	Type	Mandatory/Optional	Comments
efold	<a href="#">EfoIdModel</a>	Mandatory	Model containing the data needed to find the EFO document

### 3.16.3. Response

Property	Type	Description
Boolean value	bool	A Boolean value indicating whether the reporting is done properly or not

### 3.16.4. Exceptions

Error code	Description
123	An exception occurred while processing your request
147	The EFO id is not properly set
167	You are not authorized to use this web method
220	This EFO item is already reported missing

## 3.17. GenerateJobDocument

### 3.17.1. Description

This method generates a job document based on the provided two documents for chapter two and three and the stored default document for chapter1. It returns the URL and Id of the generated document and the list of failed EFO Ids.

A sample job document contains five main sections.

1. **Cover page** – This is the first page of the generated document and will contain the property and Company Information. If companies have uploaded the company logo and description to the Boligmappa Bedrift system then it will be also included in the cover page. If they are not provided them, relevant spaces will keep empty so that users can include the logo and description manually.
2. **Table of Contents** – The description for Chapter one too can be customized in the Boligmappa Bedrift admin's company profile page. If this value is not set in the profile page, a default description ("Generell brukerveiledning for elektriske installasjoner") will be used.
3. **Chapter 1** – Companies are provided the possibility to upload company default chapter one document to Boligmappa Bedrift. For the companies who have uploaded a default chapter one document it will be used as the chapter one of job documents generated by particular company. If default chapter one document is not provided by any company, the '[Default Boligmappa chapter one document](#)' will be used.
4. **Chapter 2** – This section of the document will be generated by the user input provided as the chapterTwo. If this is not provided a page with a help text will be added under ChapterTwo. [View the Chapter two help text.](#)
5. **Chapter 3** – This section will contain a list of EfoDocuments. If user has provided a Url or Base64Encoded data string as the input 'chapterThree' it will be used for this section. If the user has provided a list of EFO Ids as the input 'chapterThree', this section will be generated by retrieving the requested EFO documents.

### 3.17.2. Request

Parameter	Type	Mandatory/Optional	Comments
chapterTwo	<a href="#">ChapterInputModel</a>	Optional	Document to be inserted as Chapter 2.
chapterThree	<a href="#">EfoChapterInputModel</a>	Mandatory	Document to be inserted as Chapter 3 or a set of EFO ids which can be used to generate Chapter 3 by getting relevant EFO documents
documentName	String	Mandatory	Name for the generated output document
plantId	Long	Mandatory	Plant Id to which the generated document should be associated
orderNo	String	Optional	Order number
applicationName	String	Mandatory	Third party application identifier, identifying the client consuming the web service – (Length of the applicationName should be less than or equal to 10)

### 3.17.3. Response



Property	Type	Description
Document	<a href="#">DocumentOutputModel</a>	A model containing the URL to the generated document, document Id and the failed EFO Ids list

### 3.17.4. Exceptions

Error code	Description
111	PlantId does not exist for your company
123	An exception occurred while processing your request
138	ApplicationName length is exceeded maximum allowed character limit (10)
144	One or more of the input document models does not contain adequate information (EfoIds, url or Base64 encoded data)
146	The application name is not set
148	Document name cannot be empty
150	Could not find EFO documents for any of the EFO Ids provided
151	Company is not authorized to access one or more given documents
152	No property connected to the given plant id
153	Decoding of 64 bit encoded data is failed
154	Either a valid plant Id or a boligmappa number of the property should be provided
155	One or more of the input documents are not in the valid PDF format. (Only the PDF format is supported for this version)
157	Plant Id is required
167	You are not authorized to use this web method

## 3.18. EditJobDocumentChapterTwo

### 3.18.1. Description

This method can be used to edit the Chapter Two of a previously generated job document.

### 3.18.2. Request

Parameter	Type	Mandatory/Optional	Comments
jobDocument	<a href="#">DocumentInputModel</a>	Mandatory	Model containing the generated document from the GenerateJobDocument method
overwrite	boolean	Mandatory	If this field is set to TRUE, the existing Chapter Two section

			of the document will be removed, and the given document will be added. If it is set to FALSE, the existing Chapter Two section will be preserved and the given document will be appended to this section.
inputDoc	<a href="#">ChapterInputModel</a>	Mandatory	Document to be inserted as Chapter 2
documentName	string	Mandatory	Name of the document
plantId	long	Mandatory	Plant Id to which the generated document should be associated
orderNo	string	Optional	Order number
applicationName	string	Mandatory	Third party application identifier, identifying the client consuming the web service – (Length of the applicationName should be less than or equal to 10)

### 3.18.3. Response

Property	Type	Description
Document	<a href="#">DocumentOutputModel</a>	A model containing the URL to the generated document and document Id.

### 3.18.4. Exceptions

Error code	Description
111	PlantId does not exist for your company
123	An exception occurred while processing your request
138	ApplicationName length is exceeded maximum allowed character limit (10)
144	One or more of the input document models does not contain adequate information (EfoIds, url or Base64 encoded data)
145	The plant id is invalid
146	The application name is not set
148	Document name cannot be empty
149	Input job document is not set
151	Company is not authorized to access one or more given documents
152	No property connected to the given plant id
153	Decoding of 64 bit encoded data is failed
155	One or more of the input documents are not in the valid PDF format. (Only the PDF format is supported for this version)

159	Unable to parse the input job document. Make sure you have uploaded a document generated by the Boligmappa system
167	You are not authorized to use this web method
174	Provided Boligmappa Document id is invalid

## 3.19. EditJobDocumentChapterThree

### 3.19.1. Description

This method can be used to edit the Chapter Three of a previously generated job document.

### 3.19.2. Request

Parameter	Type	Mandatory/Optional	Comments
jobDocument	<a href="#">DocumentInputModel</a>	Mandatory	Model containing the generated document from the GenerateJobDocument method
overwrite	boolean	Mandatory	If this field is set to TRUE, the existing Chapter Three section of the document will be removed, and the given document will be added. If it is set to FALSE, the existing Chapter Three section will be preserved and the given document will be appended to this section.
inputDoc	<a href="#">EfoChapterInputModel</a>	Mandatory	Document to be inserted as Chapter 3 or a set of EFO ids which can be used to generate Chapter 3 by getting relevant EFO documents
documentName	string	Mandatory	Name of the document
plantId	long	Mandatory	Plant Id to which the generated document should be associated
orderNo	string	Optional	Order number
applicationName	string	Mandatory	Third party application identifier, identifying the client consuming the web service - (Length of the applicationName should be less than or equal to 10)

### 3.19.3. Response

Property	Type	Description
Document	<a href="#">DocumentOutputModel</a>	A model containing the URL to the generated document, document Id, and a list of failed EFO Ids.

### 3.19.4. Exceptions

Error code	Description
111	PlantId does not exist for your company
123	An exception occurred while processing your request
138	ApplicationName length is exceeded maximum allowed character limit (10)
144	One or more of the input document models does not contain adequate information (Efolds, url or Base64 encoded data)
145	The plant id is invalid
146	The application name is not set
148	Document name cannot be empty
149	Input job document is not set
150	Could not find EFO documents for any of the EFO Ids provided
151	Company is not authorized to access one or more given documents
152	No property connected to the given plant id
153	Decoding of 64 bit encoded data is failed
155	One or more of the input documents are not in the valid PDF format. (Only the PDF format is supported for this version)
159	Unable to parse the input job document. Make sure you have uploaded a document generated by the Boligmappa system
167	You are not authorized to use this web method
174	Provided Boligmappa Document id is invalid

## 3.20. [GetDocumentationByBoligmappaNumber](#) New!

### 3.20.1. Authorization

Special level of permission is required to access this web service and please request permission from Boligmappa.

### 3.20.2. Description

This web method can be used to retrieve all the documents associated to a property by Boligmappa number.

### 3.20.3. Request

Parameter	Type	Mandatory/Optional	Comments
boligmappaNumber	string	Mandatory	Boligmappa Number
applicationName	string	Mandatory	Application Name

### 3.20.4. Response

Property	Type	Description
Documents	List< <a href="#">AuditorDocumentOutputModel</a> >	List of documents for the given Boligmappa number

### 3.20.5. Exceptions

Error code	Description
106	Boligmappa Number does not exist in system
123	An exception occurred while processing your request
138	ApplicationName length is exceeded maximum allowed character limit (10)
146	The application name is not set
167	You are not authorized to use this web method
176	Boligmappa number is not provided

## 3.21. GetDocumentationByMatrikkel

### 3.21.1. Authorization

Special level of permission is required to access this web service and please request permission from Boligmappa.

### 3.21.2. Description

This web method can be used to retrieve all the documents associated to a property by matrikkel. Housing cooperatives are not supported in this web method.

### 3.21.3. Request

Parameter	Type	Mandatory/Optional	Comments
Knr	Int	Mandatory	Knr

Gnr	Int	Mandatory	Gnr
Bnr	Int	Mandatory	Bnr
Fnr	Int	Optional	Fnr
Snr	Int	Optional	Section number for sections properties
applicationName	string	Mandatory	Application Name

### 3.21.4. Response

Property	Type	Description
Documents	List< <a href="#">AuditorDocumentOutputModel</a> >	List of documents for the given plant id

### 3.21.5. Exceptions

Error code	Description
109	Given Matrikkel does not exist in system
110	Input parameters contain null or invalid data
123	An exception occurred while processing your request
138	ApplicationName length is exceeded maximum allowed character limit (10)
146	The application name is not set
166	No documents found for the given matrikkel
167	You are not authorized to use this web method
168	Given is a matrikkel of a Housing cooperative. This type of property is not supported in this method

## 3.22. GetDocumentationForHousingCorpShare

### 3.22.1. Authorization

Special level of permission is required to access this web service and please request permission from Boligmappa.

### 3.22.2. Description

This web method can be used to retrieve all the documents associated to a property by OrganizationId and ShareNo.

### 3.22.3. Request

Parameter	Type	Mandatory/Optional	Comments
OrganizationId	long	Mandatory	Organization number
ShareNo	Int	Mandatory	Share number

applicationName	string	Mandatory	Application Name
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### 3.22.4. Response

Property	Type	Description
Documents	List< <a href="#">AuditorDocumentOutputModel</a> >	List of documents for the given OrganizationId and ShareNo

### 3.22.5. Exceptions

Error code	Description
110	Input parameters contain null or invalid data
123	An exception occurred while processing your request
138	ApplicationName length is exceeded maximum allowed character limit (10)
146	The application name is not set
167	You are not authorized to use this web method
168	Given is a matrikkel of a Housing cooperative. This type of property is not supported in this method
171	Invalid organization number or share number
222	No Documents found for the given housing cooperative share

## 3.23. IsPropertyExistingInBoligmappa

### 3.23.1. Authorization

Special level of permission is required to access this web service and please request permission from Boligmappa.

### 3.23.2. Description

A web service is available to confirm that a property is registered in the Boligmappa system.

### 3.23.3. Request

Parameter	Type	Mandatory/Optional	Comments
matrikkelModel	<a href="#">MatrikkelInputModel</a>	Mandatory*	Matrikkel Input Model
housingCoopInputModel	<a href="#">HousingCoopInputModel</a>	Mandatory*	Housing coop input model
ApplicationName	String	Mandatory	Application Name

### Notes:

- Either matrikkelModel or housingCoopInputModel is mandatory \*

### 3.23.4. Response

Property	Type	Description
bool	Boolean	True or False

### 3.23.5. Exceptions

Error code	Description
110	Input parameters contain null or invalid data
123	An exception occurred while processing your request
138	ApplicationName length is exceeded maximum allowed character limit (10)
146	The application name is not set
167	You are not authorized to use this web method
169	Only one of the Matrikkel model or Housing coop info model should be provided
170	Given is a matrikkel of a Housing cooperative. You cannot uniquely identify a housing coop share using matrikkel. Please input the housingCoopInputModel

## 3.24. GetPropertyAndBuildingDetails New

### 3.24.1. Description

This web method returns building and property details for the given matrikkel and building number.

Notes:

- If the provided matrikkel is registered in Boligmappa system, property and building details will be returned from boligmappa database. In that case boligmappa number and building id will be available in the output.
- If the given matrikkel is not yet registered or partially registered (only few sections or shares are registered) in Boligmappa, property and building details will be retrieved from Infoland service as well.
- If a building number is provided in the input, only the properties associated with the given building will be returned.
- If a matrikkel of a section property is provided without Snr, building details of all sections will be returned
- If the buildings located in a given matrikkel does not contain any properties, property list in the output model will contain zero elements.

### 3.24.2. Request

Parameter	Type	Mandatory/Optional	Comments
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matrikkel	<a href="#">Matrikkel</a>	Mandatory	Matrikkel
buildingNumber	long	Optional	Building Number
applicationName	String	Mandatory	Application Name

### 3.24.3. Response

Property	Type	Description
PropertyAndBuildingInfo	<a href="#">PropertyAndBuildingInfo</a>	List of Properties and List of Buildings registered for the given matrikkel

### 3.24.4. Exceptions

Error code	Description
110	Input parameters contain null or invalid data
123	An exception occurred while processing your request
138	ApplicationName length is exceeded maximum allowed character limit (10)
146	The application name is not set
178	No property or building details found for the given matrikkel and building number

## 3.25. GetFileTypes

### 3.25.1. Description

This web method returns file types supported in Boligmappa.

### 3.25.2. Request

None

### 3.25.3. Response

Property	Type	Description
fileTypeModels	List< <a href="#">FileTypeModel</a> >	List of file types supported in boligmappa

### 3.25.4. Exceptions

Error code	Description
123	An exception occurred while processing your request
167	You are not authorized to use this web method

## 4. Data Types

This is a list of all data types used in Boligmappa web methods.

### 4.1. MatrikkelOwnerModel

Property	Type	Description
FirstName	string	First name of the owner
LastName	string	Last name of the owner
DefaultAddress	string	Default address – will not be null if property owner is a boligmappa user
OrganizationNumber	string	Organization number if the property is owned by a company else it is set to null

### 4.2. MatrikkelReturnModel

Property	Type	Description
EdokNumber	string	Boligmappa number –value is null if the property is not registered in Boligmappa
PlantId	long	Plant id will be zero if no plants associated with the given property
Knr	int	Knr
Gnr	int	Gnr
Bnr	int	Bnr
Fnr	int	Fnr
Snr	int	Snr
Lnr	int	Share id for House co-operatives
StreetAddress	string	Street address
StreetName	string	Street Name
HouseNumber	int	House Number
HouseSubNumber	string	House sub number
PostalCode	string	Postal code
PostalPlace	string	Postal Place
Tag	string	Application name
Owners	List< <a href="#">MatrikkelOwnerModel</a> >	Property owner list

### 4.3. DocumentModel

Property	Type	Description
DocumentId	long	Id of the document
FileName	string	File name
FileTypeId	int	Available Types : 0- Undefined, 1-Text, 2-Word Docx, 3-Word Doc, 4-PDF, 5- Excel Xlsx, 6- Excel Xls, 7 - Powerpoint Pptx, 8 - Powerpoint Ppt , 9 - Image Jpg, 10 - Image Png, 11 - Image Tif , 12 - Image Bmp, 13 - Word Rtf
DocumentTypeId	int	Available document type ids are listed below under DocumentSendModel.
Title	string	Document title
Description	string	Description
OrderNumber	string	Order number
UpdatedDate	string	The last updated date
Url	string	the public URL from which this document can be downloaded
EfoNumber	string	This feature is not yet implemented
Path	string	The path in terms of plant name/sub folder/file name
Official	bool	Whether the document is official or personal
OwnedById	long	The user id of the first person who uploaded the document
ShowInBoligmappen	bool	True if this document is visible to boligmappa.no
Status	int	Value whether document is deleted or not. Will always be 1
PdfDocId	long	Id of the generated PDF document
PdfDocPath	string	The path of the PDF document in terms of plant name/sub folder/file name
IsEdok	bool	True if document is uploaded to a plant not directly to the property. (Obsolete - will be removed in future version of web service)
ApplicationTag	string	The application that created the doc in the database
FolderId	long	Id of the document containing folder

### 4.4. PropertyAndPlantInfoModel

Property	Type	Description
PlantId	long	('0' if this company has no plant tied to this Boligmappa number
Plant Name	String	null if this company has no plant tied to this Boligmappa number
PropertyOwners	List< <a href="#">PropertyOwner</a> >	Property owners
StreetName	String	Street name
HouseNumber	int	House number

HouseSubNumber	String	House sub number
PostalCode	String	Postal code
PostalArea	String	Postal area
Knr	int	Knr
Gnr	int	Gnr
Bnr	int	Bnr
Fnr	int	Fnr
Snr	int	Section number for sections properties
Lnr	int	Share ID for housing cooperatives
Latitude	String	Location of the property - latitude
Longitude	String	Location of the property - longitude

#### 4.5. PropertyAndPlantInfoByMatrikkelModel

Property	Type	Description
EdokNumber	String	null if this property does not exist in boligmappa database
PlantId	long	('0' if this company has no plant tied to this Boligmappa number
Plant Name	String	null if this company has no plant tied to this Boligmappa number
PropertyOwners	List< <a href="#">PropertyOwner</a> >	Property owners
StreetName	String	Street name
HouseNumber	int	House number
HouseSubNumber	String	House sub number
PostalCode	String	Postal code
PostalArea	String	Postal area
Latitude	String	Location of the property - latitude
Longitude	String	Location of the property - longitude

#### 4.6. PropertyOwner

Property	Type	Description
Firstname	string	First name of the property owner
Lastname	string	Last name of the property owner
OrganizationNumber	string	Organization number if the property is owned by a company else it is set to null

#### 4.7. DeleteDocumentModel

Property	Type	Description
DocumentId	long	ID of the deleted document

IsDeleted	bool	Is deleted
ErrorMessage	string	Error message if any

## 4.8. DocumentSendModel

Property	Type	Mandatory/Optional	Description
FileName	String	Mandatory	Only file name and extension, not path (ex: test.txt)
DocumentTypeId	Int	Mandatory	Available document type ids are listed below.
Url	String	Optional	A url of a document (ex: <a href="http://martinfowler.com/articles/nosql-intro.pdf">http://martinfowler.com/articles/nosql-intro.pdf</a> )
Title	String	Mandatory	Document title
Description	String	Optional	Description of the document
OrderNumber	String	Optional	Order for which the document associates with
Data	String	Optional	Base 64 encoded data
IsVisibleInBoligmappa	bool	Optional	Set whether this document is visible in boligmappa.no or not
FolderName	string	Optional	Name of the folder to which document should be uploaded
ProfessionId	int	Mandatory	Available profession ids are listed below. Users are allowed to use only the professions registered for their company.

### Notes:

DocumentSendModel is one of the input model for SendDocument and SendDocuments web methods. When input a DocumentSendModel, following facts should be considered.

- Available Document Type Ids

Document Type Id	Document Type Name
0	Udefinert
1	Sluttkontroll
2	Fdv
3	Samsvareserklæring
4	Elkontroll
5	Fasadetegning
6	Plantegning
7	Representative snitt
8	Bebyggelsesplan

9	Energiberegning
10	Produktblad
11	Serviceavtale
13	Brukstillatelse
14	Målebrev
15	Tillatelser
16	Ferdigattest
17	Gjennomføringsplan
18	Risikovurdering
19	Trykkprøving
20	Overtagelsesprotokoll
21	Sikker vanninstallasjon
22	NELFO 5 sikre
23	Uavhengig kontroll
24	NS3600
25	Kursfortegnelse

- Available profession ids

ProfessionId	Profession Name
-1	Uspesifisert (Obsolete)
1	Elektriker
2	Rørlegger
16	Byggmester
6	Maler/Tapetserer
8	Tak/Blikkenslager
18	Ventilasjon/kulde

**Note:**

- Please note that the specified profession will be displayed to the property owners in Boligmappa when displaying the documents sent by companies to them. So it is really important to set the relevant profession always other than setting “Unspecified” when sending a document.
- “Unspecified” profession is obsolete now and will be removed in our future versions. As of now, if -1 is provided as the profession id, the profession of the Authenticated user will be set as the profession of the document.
- Either Url or Data should be provided.

**Scenario 1:**

FileName: Test\_Document\_1.txt  
 DocumentTypeId: 1  
 Title: Test Document 1  
 Data: VGVzdCBkYXRh (Base64 encoded file)

ProfessionID: -1

**Scenario 2:**

FileName: Test\_Document\_2.txt  
DocumentTypeId: 1  
Title: Test Document 2  
URL: http://www.fgdc.gov/metadata/csdgm/v2\_0698.txt  
ProfessionID -1

- FileName is mandatory. When users download the file, this is used as filename when saving the document on the downloaded computer
- Document data should be given as Base64 encoded data. Won't work with raw texts.
- Maximum size of file to be uploaded should be below 100MB whether specifying the URL or Data.
- If user provides a FolderName, the system will create a new folder with the given FolderName on the property and then create the document under that folder
- Following is the list of file types that are convertible to PDF:  
".jpg", ".pdf", ".docx", ".doc", ".xlsx", ".xls", ".png", ".bmp", ".tif", ".ppt", ".pptx", ".txt", ".rtf"
- Even though the system supports only above mentioned file types for PDF conversions, it allows uploading of any file type. If user uploads a file which is not in the above list with 'IsVisibleInBoligmappa' set to true, it will automatically create a new PDF file with a link to the original file and show that in Boligmappa so that the user can download original file. However, if 'IsVisibleInBoligmappa' is set to false, system will upload just the original file.

#### 4.9. SingleDocumentModel

Property	Type	Description
DocumentId	long	Id of the document
Title	string	Document title
Description	string	Description
OrderNumber	string	Order number
DocumentTypeId	int	Same as the available Document Type Ids list for DocumentSendModel above
FileName	string	File name
FileTypeId	int	Available Types : 0- Undefined, 1-Text, 2-Word Docx, 3-Word Doc, 4-PDF, 5- Excel Xlsx, 6- Excel Xls, 7 - Powerpoint Pptx, 8 - Powerpoint Ppt , 9 - Image Jpg, 10 - Image Png, 11 - Image Tif , 12 - Image Bmp, 13- Word Rtf
Url	string	the public URL from which this document can be downloaded
FolderId	long	Id of the document containing folder
OwnerId	long	The user id of the first person who uploaded the document
Status	int	Value whether document is deleted or not. Will always be 1



ShowInBoligboken	bool	True if this document is visible to boligmappa.no
UpdatedDate	string	The last updated date
ApplicationTag	string	The application that created the doc in the database
EfoNumber	string	This feature is not yet implemented
Official	bool	Whether the document is official or personal
PdfDocId	long	Id of the generated PDF document
PdfDocPath	string	The path of the PDF document in terms of plant name/sub folder/file name
IsEdok	bool	True if document is uploaded to a plant not directly to the property. (Obsolete - will be removed in future version of web service)
OriginalDocPath	string	The unique name generated by Boligmappa to store the file in the system
PlotId	long	Id of the property linked to the plant to which document is uploaded

#### 4.10. EfoIdModel

Property	Type	Description
EfoId	string	ID of the EFO Document
VendorId	string	Vendor of the specified EFO Id
DocumentType	string	Document type under which the EFO document is listed Valid types are: <ul style="list-style-type: none"> <li>• FDV</li> <li>• HMS</li> <li>• productSheet</li> <li>• userManual</li> <li>• sketch</li> </ul>

#### 4.11. DocumentInputModel

Property	Type	Description
BoligmappaDocId	long	ID of a document generated by Boligmappa
Url	string	URL of a document to be used
Data	string	Document encoded in to base 64 string

## 4.12. DocumentOutputModel

Property	Type	Description
BoligmappaDocId	long	ID of the generated document
Url	string	URL of the generated document
FailedEfoIds	List< <a href="#">EfoIdModel</a> >	Ids for which the EFO documents are not found

## 4.13. ChapterInputModel

Property	Type	Description
Url	string	URL of a document to be used
Data	string	Document encoded in to base 64 string

## 4.14. EfoChapterInputModel

Property	Type	Description
Efolds	List< <a href="#">EfoIdModel</a> >	List of EFO Ids to be used to generate required EFO document
Url	string	URL of a document to be used
Data	string	Document encoded in to base 64 string

## 4.15. JobNoteOutputModel

Property	Type	Description
BoligmappaDocId	long	ID of the generated document
Url	string	URL of the generated document
FileName	string	Name of the file to be displayed

#### 4.16. FileInputModel

Property	Type	Description
Url	string	URL of a document to be used
Data	string	Document encoded in to base 64 string

#### 4.17. CombinedFilesOutputModel

Property	Type	Description
BoligmappaDocId	long	ID of the generated document
Url	string	URL of the generated document
FileName	string	Name of the file to be displayed

#### 4.18. AuditorDocumentOutputModel

Property	Type	Description
DocumentId	long	Id of the document
FileName	string	File name
FileTypeId	Int	Available Types : 0- Undefined, 1-Text, 2-Word Docx, 3-Word Doc, 4-PDF, 5- Excel Xlsx, 6- Excel Xls, 7 - Powerpoint Pptx, 8 - Powerpoint Ppt , 9 - Image Jpg, 10 - Image Png, 11 - Image Tif, 12 - Image Bmp
DocumentTypeId	Int	Available document type ids are listed below under DocumentSendModel.
Title	String	Document title
Description	String	Description
UpdatedDate	String	The last updated date
Url	String	the public URL from which the PDF version of this document can be downloaded
Company Name	String	Company name of the document that uploaded this document. Boligmappa if it is

		uploaded by the property owner.
Industry	String	Industry of the company who uploaded this document

#### 4.19. MatrikkelInputModel

Knr, Gnr and Bnr should be provided to be considered as a complete matrikkel

Property	Type	Description
Knr	int	Knr
Gnr	int	Gnr
Bnr	int	Bnr
Fnr	int	Fnr
Snr	int	Snr

#### 4.20. HousingCoopInputModel

Property	Type	Description
OrganizationId	long	Organization Id
ShareNo	int	Share number

#### 4.21. DocumentUploadStatus

Property	Type	Description
DocumentTitle	String	Document Title
DocumentId	long	Document Id
UploadStatusCode	int	Upload Status Code
ErrorCode	int	Error Code

#### 4.22. Matrikkel

Knr, Gnr and Bnr should be provided to be considered as a complete matrikkel

Property	Type	Description
Knr	int	Knr
Gnr	int	Gnr
Bnr	int	Bnr
Fnr	int	Fnr
Snr	int	Snr

### 4.23. PropertyAndBuildingInfo

Property	Type	Description
PropertyList	List< <a href="#">PropertyInfo</a> >	List of properties
BuildingList	List< <a href="#">BuildingInfo</a> >	List of buildings

### 4.24. PropertyInfo

Property	Type	Description
BoligmappaNumber	String	Boligmappa number
PropertyType	String	Property Type
StreetName	String	Street Name
HouseNumber	int	House Number
HouseSubNumber	String	House sub number
PostalCode	String	Postal Code
PostalArea	String	Postal Area
TotalArea	decimal	Areal
TotalRoomCount	int	Antall rom
BathroomCount	int	Antall bad
ToiletCount	int	Antall WC
UnitNumber	string	Unit number
MainBuildingId	long	Id of the Main Building of Property
MainBuildingNumber	long	Bygningsnr of Main Building
MainBuildingIteration	int	Løpenr of Main Building

### 4.25. BuildingInfo

Property	Type	Description
BuildingId	long	Building Id
BuildingNumber	long	Bygningsnr
Iteration	int	løpenr
BuildingTypeCode	String	Bygningstype kode
BuildingType	String	Bygningstype
BuildingStatus	String	Bygningsstatus
FloorCount	String	Antalletasjer
PropertyCount	int	Antallboliger
TotalBuildingArea	decimal	Bruksarealtotalt
UtilizedBuildingArea	decimal	Bruksarealbolig
UsedFrom	int	Tatt ibruk (GAB)

#### 4.26. MatrikkelPlantInfo

Property	Type	Description
PlantId	long	Id of the created plant
EdokNumber	string	Boligmappa Number
StreetAddress	string	Street Address
PropertyOwners	List< <a href="#">PropertyOwner</a> >	Owners of the property

#### 4.27. EdokPlantInfo

Property	Type	Description
PlantId	long	Id of the created plant
Knr	int	Knr
Gnr	int	Gnr
Bnr	int	Bnr
Fnr	int	Fnr
Snr	int	Snr
Lnr	int	Share ID for housing co-operatives
PropertyOwners	List< <a href="#">PropertyOwner</a> >	Owners of the property

#### 4.28. FileTypeModel

Property	Type	Description
Id	int	Id of the file type
FileName	string	File type (e.g. PDF, Word Doc)

## 5. Exceptions

The following table lists all the Exceptions that are returned by the Boligmappa Web Service, and the error conditions that they represent.

Error code	Description
101	Postal number does not exist in system
102	The street address cannot be null or empty
103	Invalid street address format
104	Infoland is not available
105	Plant already exists in system
106	Boligmappa Number does not exist in system
107	Plant creation failed due to internal error
108	Input parameters contain invalid or null data
109	Given Matrikkel does not exist in system
110	Input parameters contain null or invalid data
111	PlantId does not exist for your company
112	There is no document to upload
113	One or more mandatory fields have not been supplied as input
114	File name contains invalid character(s)
115	Given professionId(s) are not valid
116	Invalid document type ID
117	Provided Snr is not valid
118	Snr is not provided with the input matrikkel. But given is a sectioned property
119	Snr is provided with the input matrikkel. But given is not a sectioned property
120	Provided Lnr is not valid
121	Lnr is not provided with the input matrikkel. But given is a housing corporative share
122	Lnr is provided with the input matrikkel. But given is not a housing corporative share
123	An exception occurred while processing your request
124	IIS_IUSERS do not have write permission to wwwroot folder
125	Cannot create EFO documents
126	File extension not specified
127	Postal code does not exist in the specified municipality
129	Infoland failed to return matrikkels for housing corporative shares
130	Input ID is either zero or negative. Please enter a positive value for the id
131	This type of property is not supported
132	PlantId does not exist
133	Url or Data must be provided to create a document file
134	Document does not exist for the given document id
135	User is not authorized to access the document with given document id
136	Provided Url is invalid
138	ApplicationName length is exceeded maximum allowed character limit (10)

139	Current version of Boligmappa does not support these type of properties (aksje/obligasjonsleiligheter)
140	Input Efold list is not set to a correct value
141	Input Efold list is empty
142	One or more of the input EFO ids are invalid
143	Template document is not set
144	One or more of the input document models does not contain adequate information (EfoIds, url or Base64 encoded data)
145	The plant id is invalid
146	The application name is not set
147	The EFO id is not properly set
148	Document name cannot be empty
149	Input job document is not set
150	Could not find EFO documents for any of the EFO Ids provided
151	Company is not authorized to access one or more given documents
152	No property connected to the given plant id
153	Decoding of 64 bit encoded data is failed
154	Either a valid plant Id or a boligmappa number of the property should be provided
155	One or more of the input documents are not in the valid PDF format. (Only the PDF format is supported for this version)
156	The attached plant of the input document, and the plant Id given does not match
157	Plant Id is required
158	Input for chapter 3 does not contain adequate information (a URL or Base64 encoded data)
159	Unable to parse the input job document. Make sure you have uploaded a document generated by the Boligmappa system
160	Input for chapter 2 does not contain adequate information (a URL or Base64 encoded data)
161	Job description exceeded the maximum character limit of 500
162	No files provided to combine
163	An error occurred while combining the files
164	One or more of the input file models does not contain adequate information (a URL or Base64 encoded data)
165	The given profession is not registered to your company
166	No documents found for the given matrikkel
167	You are not authorized to use this web method
168	Given is a matrikkel of a Housing cooperative. This type of property is not supported in this method
169	Only one of the Matrikkel model or Housing coop info model should be provided
170	Given is a matrikkel of a Housing cooperative. You cannot uniquely identify a housing coop share using matrikkel. Please input the housingCoopInputModel.
171	Invalid organization number or share number.
172	CustomerName length is exceeded maximum allowed character limit (100)
173	Invalid Order Number
174	Provided Boligmappa Document id is invalid
175	The job end date needs to be later than the job start date
176	Boligmappa number is not provided
178	No property or building details found for the given matrikkel and building number



220	This EFO item is already reported missing
222	No Documents found for the given housing cooperative share
276	Given matrikkel does not support in boligmappa API 1.0 as it contains multiple properties. Please use Boligmappa API 2.0 or Boligmappa Bedrift

## 6. Frequently Asked Questions

### Q. How the properties can be added to Boligmappa system?

A. Properties can be added to the system in several ways.

- When a user registers in Boligmappa portal (first time login), all properties which the person own according to the Norwegian official property register (Grunnboka) will be created in Boligmappa and added to the list of properties for the user. This information is updated periodically and when a Boligmappa user acquires a new property it will (potentially with some delay) be added to the system and displayed in Boligmappa portal interface.
- When a web service user tries to create a plant for a specific property which is not registered in boligmappa using CreatePlantByMatrikkel web method, then that specific property will be automatically added to Boligmappa.

### Q. Can a company create plants for properties that are not yet noted in 'Grunnboka'?

A. Yes. There can be certain situations, a company need to create plants for properties that is not yet noted in 'Grunnboka'. In this case it is possible to create a plant in Boligmappa without matrikkel info(this will not create a property, only the plant.). Later plant can be associated to a property using Boligmappa number or matrikkel info.