SMDB Developer

Amendment summer 2025 developer guide

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Contents

Chapter 1

Introduction

Questions regarding the functionality described in this document can be directed to smdb@dst.dk.

1.1 Purpose of this guide

This document intends to guide developers responsible for integrating with SMDB safely through the updates being introduced as part of the 2025 summer amendments. It provides a short introduction into how to think about amendments in general, and this one in particular.

It is assumed that the reader is familiar with integrating with SMDB in general, using one of the 2 equivalent SOAP based APIs. This document does not contain all information needed to neither implement a new integration from scratch or make all the changes in the 2025 amendment. It is a companion document to the code lists and specification documents as explained more closely in the following sections.

1.2 Amendments

Amendments are a defined set of changes made to the SMDB schemas, as determined by the legal owners of the various data points. Some amendments only contain new code values (options) for some data fields, while other introduce changes to the DTOs that correspond to the schemas in the API. These changes affect all levels of the data gathering, from the systems integrating with SMDB, to the later data handling that result in the final statistics being calculated. These changes can happen twice a year, and are defined at least 6 months before they become active on the production environment.

An important point regarding amendments to the schemas is that they only affect new cases, where the case has specifically started after a defined cutoff date. The result is, that both the current and all previous versions of the schema should be functional, as well as the new schema as defined in the amendment, depending on the starting date of the case. Since handling multiple versions of schemas introduces complexity beyond what a single schema version does, some integrating systems only offer some versions (usually the most current) of the schemas, and refer users needing to make updates to older cases to the SMDB online frontend. All cases back in time must be entered regardless of the support of the integrating system. The exact limits to each integration is seen as a matter between the integration and their users/customers, and not enforced by SMDB.

The date of a case is defined by the *BehandlingAnmodningDato* on **AnmodningDTO** is what define the date of the case. This date should be used to evaluate which version of the schemas should be filled out.

For every amendment a new list of possible code values are released to the general specification page DST specification page, where a pdf-file defining possible values for the choices needing to be filled out in the schemas are compiled for reference. There is also a version with all changes since the previous version highlighted, using MS Words Change Tracking. We will soon have previous specifications available, but currently only the current and upcoming versions are ready for download.

For information regarding which code values/options are possible for a given period, an excel file is kept available on the main SMDB information page, where it can be found under *Leverandører* with the link name *Skemaoversigt og Kodelister (xlsx)*.

From a development perspective, the wsdl-file defining the data structure expected, will be available on the preproduction environments as early as possible, from where it can be retrieved and tested, to make the integration ready in time. Since there are 2 separate versions of the APIs and 2 endpoints, we end up with four wsdl files:

- **V0 SecureHentData:** smdbwebservice/api/external/v0/securehentdata.svc
- **V0 SecureIndsaetDate:** smdbwebservice/api/external/v0/secureindsaetdata.svc
- **V1 SecureHentDate:** smdbwebservice/api/external/v1/securehentdata.svc
- **V1 SecureIndsaetData:** smdbwebservice/api/external/v1/secureindsaetdata.svc

1.3 Amendment 2025

The changes in the amendment to the schemas for cases being created from July 1st 2025 are especially numerous, which has prompted this developer guide. Besides the size and somewhat more complicated changes than the previous years, the general amendment functionality as described above is also true here. The previous version of the schema will still need to work for cases that start in the previous period between amendments, and the changes to the schemas described in this document, should not be made to users interacting with those and older schemas. Cases being created with a start date before July 1st 2025, will get validation errors if they use data introduced in the new version of the schema.

Chapter 2

Notable larger changes

2.1 Schemas and DTOs

The DTOs (data transfer objects) defined in the APIs correspond to the schemas of the same name. For example there is the object called **AnmodningDTO** which correspond to the schema *Anmodning*. These objects will contain SOAP elements for both new and old data to be included, meaning that the same objects are used across all versions of the schemas. Here there can be differences between the 2 versions of the API, where some fields may be added either directly to the objects definition in the V1 APIs, and either in a similar manner or through the Generic objects used in the V0 API.

2.2 New List type

The 2025 summer amendment introduces a new type of data, where multiple values can be selected for a single question. This has not been the case on any previous schema question, and the format differs between the two SMDB APIs. The new List object in question is named *HenvisningPaaOpfordringAfListe* and is part of the **IndskrivningDTO**. I replaces the field *HenvisningPaaOpfordringAfKode*, which only allowed a single answer.

V0 (generics)

The List data *HenvisningPaaOpfordringAfListe* is introduced as a Generic object, which should contain a comma-separated list of the chosen value codes. A valid example value could be:

```
<web:ArrayOfGenericDTO>
  <web:GenericDTO>
    <web:FieldName>HenvisningPaaOpfordringAfListe</web:FieldName>
    <web:FieldValue>01,02,08,09</web:FieldValue>
  </web:GenericDTO>
</web:ArrayOfGenericDTO>
```

Listing 2.1: HenvisningPaaOpfordringAfListe example

V1

On the V1 of the API (which has no support for Generics, but have all elements directly defined on the DTOs), the new list field is added as a new *ArrayOfstring* element, where each string is a user-chosen valid code for the *HenvisningPaaOpfordringAfListe* field in the schema.

2.3 New StofOplysningerDTO on IvaerksaettelseDTO

Currently the **IvaerksaettelseDTO** contains information about various drugs. These are handled differently between API v0 and V1. The same information fields must now also be sent in for the main drug chosen in the field *PersonAktueltHovedstofKode* in the same schema. Since the existing functionality for sending in data on drug use is different for each API version, refer to the relevant section below for your implementation.

This field replaces the existing *HenvisningPaaOpfordringAfKode*, which must be null or left out for new cases after the amendment date. It is still possible to indicate that no main drug can be defined, in which case all options mentioned here should be left out or null, depending on your API version.

The data previously[1] included for all drug types, and included for the main drug going forward are:

- **DageIndtagetSenesteMaanedKvantitet** containing a number between 0 and 30.
- **FoersteBrugAlderKvantitet** containing the age of the persons first use of the drug. Can be null.
- **FoersteBrugAlderVilIkkeOplyseIndikator** containing a boolean that indicate that the age of first use of the drug is not available or attainable for some reason. Also nullable, and if true indicate that the age is not included.
- **IndtagelseshyppighedKode** containing a code value for the frequency of drug use as seen in the code list.
- **TypiskIndtagelsesmaadeKode** containing the way the person use the drug (e.g. injection or eating).

As mentioned the possible values of the field *TypiskIndtagelsesmaadeKode* will depend on which drug is chosen as the main drug as described in 2.3.

If the main drug information is indicated to be missing, by using the boolean value *PersonHovedstofAngivelseIkkeMuligIndikator*, the main drug type should still be null going forward, and all the data described in this section should also be left out completely (null or missing, depending on the API version).

[1] "Previously" because the existing schema fields for all drug types are being reduced, as described in section 2.4

V0 (generics)

The existing schema has the existing fields in Generics, named [drug name][field name]. For example the drug Metadon will have the field *FentanylDageIndtagetSenesteMaaned-Kvantitet*. The new data for the main drug is named in the same manner, but with the drug name being "Hovedstof" (which is Danish for main drug). The resulting field names are:

- **HovedstofDageIndtagetSenesteMaanedKvantitet**
- **HovedstofFoersteBrugAlderKvantitet**
- **HovedstofFoersteBrugAlderVilIkkeOplyseIndikator**
- **HovedstofIndtagelseshyppighedKode**
- **HovedstofTypiskIndtagelsesmaadeKode**

V1

A new **StofOplysningerDTO** is introduced on the **IndskrivningDTO** named *HovedstofOplysninger*.

Possible values of TypiskIndtagelsesmaadeKode for main drug

Since this DTO describe the persons usage of their main drug, as defined in *PersonAktueltHovedstofKode*, the acceptable values in *TypiskIndtagelsesmaadeKode* are the same as for the **StofOplysningerDTO** for that drug type. The allowed values for the main drug are the same as previously allowed on the *TypiskIndtagelsesmaadeKode* field for that specific drug, for example if *PersonAktueltHovedstofKode* is "12" indicating the persons main drug is ecstacy, the valid options for *TypiskIndtagelsesmaadeKode* will be "01", "02", "03, and "99", corresponding to the options Injection, Smoke, Eat/drink, and finally Unspecified. These are the same values previously available for *TypiskIndtagelsesmaadeKode* on the StofoplysningerDTO for ecstacy (Generic EcstasyTypiskIndtagelsesmaadeKode for V0 and EcstasyOplysninger.TypiskIndtagelsesmaadeKode for V1).

2.4 Changes to existing StofOplysningerDTO

All the drug types that are normally included in the **IvaerksaettelseDTO** are reduced to just one field, namely the number of days of using that specific drug within the last 30 days. All other fields are becoming nullable, and should be null (not included in the V0 API) for all cases starting on or after the amendment date.

Consider the field FoersteBrugAlderVilIkkeOplyseIndikator, which could previously be left as null in order to indicate a false value. Practically speaking this means that a null was interpreted as False for validation purposes. Since the value is being deprecated for new versions of the schema, except for on the new HovedstofOplysninger as discussed in the previous section, this introduces ambiguity with regards to interpreting a null value. Does it mean "False" or "null" - did a person consciously enter this data or was

it left out by mistake? Since this field is being deprecated for all fields except the new main drug version, it should simply be null for new cases on all other drug types. On the main drug the field is still ambivalent between false/null values. For older cases, the entire main drug DTO can be left out (null).

Chapter 3

Other changes

3.1 TilbudDTO dates

A Tilbud is a physical location which offer treatment for drug related issues and addiction. These are now mainly used for identifying a specific treatment offer in the **TilbudstilknytningDTO**, which define a person being treated for a period at one of these locations. The treatment period is defined with both a start- and stop-date.

Previously the Tilbud/treatment locations were manually removed from the possible options, which would frequently result in them needing to be reopened temporarily where older cases were being updated. To simplify this process, an *OpenDate* and *CloseDate* are introduced to these TilbudDTOs. They are nullable, and will be filled out over some period of time. As one would probably expect, they indicate when a treatment offer opened and when it closed. Validation is also introduced, to ensure that it is not possible to register a person as being at a treatment location before it opened or after it closed. This is evaluated by looking at the start and stop dates on the **TilbudstilknytningDTO**. If the treatment has no defined start or stop dates, the validation is meaningless.

An array of TilbudDTOs can be retrieved using the method HentAlleTilbud, and used for sending in the correct Id for the Tilbud/treatment. These will contain the dates in the Amendment release, when they are filled in. DST will not be filling out these values before the amendment date, which allow developers time to react to these changes.

This change is not part of the changes as defined by the schema-changes, but improvements internally to SMDB. Since they affect the API, the changes are being introduced together with the amendment changes, in order to minimize the impact on integrations.

3.2 Removal of schema Hep C & Kvalitet

For cases after the amendment date the entire schema Hep C & Kvalitet as defined in the **KvalHepDTO** can no longer be registered. Attempts will result in a validation error. As with the other changes in this document, the schema should still be sent in (where relevant) for cases with a start date before the amendment.

3.3 Code value changes

A range of possible options to select are being removed, replaced and renamed. The intent is, as with the other changes, that the schemas should still show the old options

and order for existing cases, but use the new options for cases after the amendment date. The details for the options are indicated in the codelist and specification documents found on the SMDB information page. Here follows a few pointers that may help clarify implementing these changes precisely:

- **Name changes:** When a field changes description, it can be unclear if it is a new option or a renaming. This can be seen by comparing the values that each option correspond to, since these do not change.

- **Order changes:** When the order of options change, this refer to the order of the options as shown to the user. As with other changes, the order should change depending on the starting date of the case.

- **Removal:** When an option is removed, a validation error stating that the option is no longer possible, will be returned if the option is used.

- **New options:** when a new option is used on old cases, a validation error stating the option is not possible on old cases, will be returned.

3.4 Exclusionary value in *HenvisningPaaOpfordringAfListe*

The new list mentioned in 2.2 contains the option "Uoplyst", which correspond to the code value 99. This option indicates that the information is not available. Since multiple values can be chosen at the same time, this means that the option "Uoplyst"/99 can not be marked together with any other values. If the value 99 is in the list, it must be the only value.

Chapter 4

Notes

4.1 Changing the BehandlingAnmodningDato

Since the **AnmodningDTO**.*BehandlingAnmodningDato* define which schema versions should be used for that case, there is a danger to allowing users to change this date after filling out other schemas. When changing this date, validations are not run again on existing schemas, which means that changing this date freely between dates that would trigger different versions of the schemas, without forcing user to re-enter those schemas, can result in unexpected versions of the schemas being used, which can negatively affect the future handling of the data. This will be prevented in a future version of SMDB, but developers of integrations should be aware of the issue and prevent this behaviour in their systems if possible.

This document, the amendment code lists and other relevant documents are freely available from stofmisbrugsdatabasens oplysningsside.