

Estonian Address Data System (ADS)

Short overview and information about extracts

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ADS is a support system in Estonian state information system, which gathers address data from different state registers, where addresses are created (mainly Land Cadastre and State Register of Construction Works (address data about buildings) and makes this data and changes available to other state information systems, which contain address data (for example Population register).

ADS consists of only legal addresses (based on administrative acts of local governments) – no address in Estonia is officially valid, before the address is registered in ADS. This ensures that ADS has the most fresh information about new addresses. Also for this reason ADS has high quality data about rural areas, where mapping solutions are not that efficient.

ADS data consists of **addresses** (*AADDRESSID* – name of database table and extract in Estonian), **address objects** (*AADDRESS_OBJEKTID*) and **address components** (*AADDRESS_KOMPONENDID*).

Addresses consist of **address components**. ADS components are divided to 8 levels as follows:

Level	Name	Probable match in Google component type	
1.	County	administrative_area_level_1	Administrative and Settlement Classification
2.	Administrative unit (city, rural municipality)	administrative_area_level_2	
3.	Settlement unit (village, borough) or city district	sublocality	
4.	Territorial address unit (mainly old gardening cooperatives, where houses are numbered randomly)	neighborhood?	Local address
5.	Traffic surface (street, road alley etc)	route	
6.	Name (place name, name of a land parcel – used mainly in rural areas)	premise?	
7.	Address number (number of a house or land parcel)	street_number	
8.	Part of the building (number of apartment or other part)	room? <i>Not used in geocoding or maps</i>	

Components have an ID and a code (4-letter identification, consisting of numbers and letters). Components in different levels can have the same code, but identifier is always unique.

Addresses are described in table AADDRESSID. The identifier of a version of the address is ADR_ID. Also address has a **code address** (KOODAADDRESS), where all the component codes, of which the address consists of are brought out. Most of the addresses (~90%) have a geographical **indication point** (VIITEPUNKT), which is set on the most important object addressed by this address (e.g if a cadastral parcel, a residential building and a non-residential buildings carry the same address, then the reference point of this address is set to the centroid of the residential building). **Many address objects can carry the same address (ADR-ID) and one address object can carry many addresses (ADR_IDs, it has parallel-addresses).**

Main address object types

Object type	Code	Number of objects
Cadastral unit	CU	635 920
EE building (residential)	EE	395 963
ME building (non-residential)	ME	860 113
Dwelling / flat	ER	577 499
Other part of building	MR	43 437
TOTAL		2 512 932

Address objects are identified by ADS_OID, which consist of 2 letters (object code and 8 numbers. When data of an address object is modified (address change or shape change), then new version of the address object is created. In that case ADS_OID stays the same, but new ADOB_ID (version identifier is created).

All ADS data is easily and with no cost available to anybody.

Example of ADS data:

To get acquainted with ADS data it is best to start with addresses itself. For this we have extract nr 9 **Addresses with components and history** (*Addressid koos komponentide ja ajalooga*) in ADS public service (<http://xgis.maaamet.ee/adsavalik/ads?xBTN.newvalja>). A small example of that file is added to this overview as well (file [extract_9_example_Anija_vald.zip](#)).

The structure of extract 9:

Väljavõte nr 9	Extract nr 9	Example data
ADR_ID	ID of the Address	2572932
Koodaadress	Code Address	371412928000001PO00005UFK00000000
Taisaadress	Full address (text)	Harju maakond, Anija vald, Kehra linn, Põrguvälja tn 6
Lahiaadress	Proximate address (text)	Põrguvälja tn 6
Olek	Status - valid (K) and invalid (V and T)	K
Kehtiv	Valid since	23.10.2017 11:33

<i>Kehtetu</i>	Invalid since	
<i>Viitepunkti x</i>	<i>Indication point X (mathematical X coordinate, 6 digits, (Y coordinate in geographical system))</i>	575190,49
<i>Viitepunkti y</i>	<i>Indication point Y (mathematical Y coordinate, 7 digits, (X coordinate in geographical system))</i>	6578453,64
<i>TaseX_kood</i>	Level X component code	01PO
<i>TaseX_nimetus</i>	Level X component name (short)	Põrguvälja tn
<i>TaseX_nimetus_liigiga</i>	Level X component name (long, differs from short name only for level 4 and 5 components)	Põrguvälja tänav
<i>Normaliseerimata tekst</i>	Address text (not used in valid addresses)	

The indication point coordinates are in L-EST 97 coordinate system. (<http://spatialreference.org/ref/epsg/3301/>). This is the official coordinate system in Estonia and its use is obligatory to all state institutions.

If you have more suggestions or recommendations how to improve our extract or ease of access of ADS data, we will be glad to improve our extracts.

Other ADS data:

In the beginning of every month we create complete extracts of all ADS data. Extracts are available in our FTP server and in the public service of ADS (<http://xgis.maaamet.ee/adsavalik/ads?xBTN.newvalja>) – descriptions only in Estonian, but field names similar to extracts in FTP server.

FTP server of ADS: ftp://ftp.maaamet.ee/ADS_valjavotted/

User: adsvaljavotted

Password: Valjav0tted

In the extracts folder there is a readme file in English as well.