

# Interface description and instructions

## Revision history

Date	Author	Change description	Interface version
26 August 2021	JM	First version	1.0
13 September 2021	JM	Added code sets	1.0
9 November 2021	JM	Corrected errors	1.0
2 February 2022	JM	ESCO version correction	1.0
22 June 2022	JM	<ul style="list-style-type: none"> <li>Modified the interface authentication method to comply with OAuth 2.0</li> <li>Improved interpretation of occupations for main occupation</li> <li>Improved interpretation of flexible location and if it's mandatory</li> <li>Added archived and blocked to job posting statuses</li> <li>Changed required skills to optional</li> <li>Removed appreciated skills</li> <li>Amended principal -&gt; recruitment principal</li> <li>Added temporary work principal</li> <li>Specified contact information element</li> <li>Specified marketing description element</li> <li>Modified code set values to correspond to the internal code sets of Job Market Finland</li> <li>Added working language</li> <li>Added code set for fixed-term employment length</li> </ul>	1.0
27 September 2022	JM	<ul style="list-style-type: none"> <li>Added status chart for allowed statuses, removed status DRAFT and changed the statuses to numeric values</li> <li>Removed enum values from fields by using code sets to make the usage of code sets more straightforward</li> <li>Increased level of language skills and associated code set, which was missing from Language skills</li> <li>Updated examples</li> </ul>	1.0
16 December 2022	JM	<ul style="list-style-type: none"> <li>Added information about the test and production environments</li> </ul>	1.0
24 January 2023	JM	<ul style="list-style-type: none"> <li>Added information on the implementation of the interface and more detailed technical instructions for authentication</li> </ul>	1.0
5 March 2024	JM	<ul style="list-style-type: none"> <li>Changed IlmoittajanYhteystieto to required element</li> </ul>	1.0

		<ul style="list-style-type: none"><li>• Removed tyotarjoustenMaara and tyotarjoustenVastaanotto elements</li><li>• Changed HakemuksenUrlit to localised element</li></ul>	
--	--	---	--

## Table of contents

1	Introduction .....	4
2	How to start using the API .....	4
3	Environments and authentication .....	4
4	Interface user and job poster .....	6
5	Interface entities.....	6
6	Job posting creation.....	8
7	Job posting search .....	12
8	Job posting search using Business ID of the job posting employer.....	13
9	Job posting modification .....	13
10	Job posting removal .....	14
11	Code sets used in the interface.....	14
11.1	Driver's license (vaaditutAjokorttiluokat) .....	14
11.2	Occupation (ammatti.luokiteltuArvo).....	14
11.3	Posting status (ilmoituksenTila) .....	14
11.4	Language (kielitaito and tyoKielet) .....	15
11.5	Level of language skills (kielitaidonTaso) .....	15
11.6	Licenses and permissions (lupaKoodit) .....	15
11.7	Level of education (koulutusaste).....	18
11.8	Municipality (kunta).....	18
11.9	Country (maa) .....	18
11.10	Region (maakunta).....	18
11.11	Duration of fixed term (maaraaikaisuudenKesto) .....	18
11.12	Competence (osaaminen.luokiteltuArvo).....	18
11.13	Basis for salary (palkanPeruste).....	18
11.14	Work begins (tyoAlkaa).....	19
11.15	Working hours (tyoAika).....	19
11.16	Continuity of work (tyonJatkuvuus).....	19
11.17	Working time (tyoskentelyAika) .....	19
11.18	Time period of working hours (tyoTunnitAjanjakso).....	20
11.19	Shift work (vuorotyö).....	20

## I Introduction

This document describes in more detail the features of the job posting import interface provided by Job Market Finland. The manual applies to interface version 1.0.

The introduction of the job posting import interface is described in chapter 2. The import interface is a REST interface, and its use requires separate authentication data. More detailed information related to this can be found in chapter 3.

A more detailed description of the interface's entities and calls starts in section 5. The corresponding documentation can be found in the OpenApi description, which is also available at the Job Market Finland [website](#). It can be viewed in the [Swagger editor](#), for instance. Examples of use have been added to this manual.

Job postings use the European ESCO classification to describe occupations and skills. This will ensure that jobs can also be transferred to the European Job Mobility Portal (EURES), where appropriate. The ESCO classification in use is version 1.1.0 and more information is available [here](#).

A job posting has a wide range of code sets. The allowed value is described in the API documentation and in section 11.

## 2 How to start using the API

Implementation of the interface requires acceptance of the terms of use and a separate [notification of the activation](#) to the KEHA Centre. After this, the user of the interface will be provided with credentials to Job Market Finland's QA environment, and the necessary connection openings will be made. The final implementation of the import interface requires testing it first in the QA environment. When the user of the interface considers the testing to be complete, information about it must be sent to the email address [tmt-rajapinnat.keha@ely-keskus.fi](mailto:tmt-rajapinnat.keha@ely-keskus.fi). After this, the KEHA Centre ensures the quality of the testing by reviewing certain test cases together with the user of the interface. IDs for the import interface will be delivered after the testing has been found to be comprehensive.

## 3 Environments and authentication

The invitations used are the same in both environments, but the first part of the address changes depending on the environment.

The use of the interface is protected. Programmatic Authentication is performed in accordance with the Microsoft Identity Platform Client Credentials Flow ([more information](#)). The third-party application calls the Microsoft Graph api, using OAuth2.0's Client Credentials Flow. The Microsoft interface returns an Access Token to the end user. After this, the third-party application calls the HTTPS interface of TE-Digi.

### 3.1 Test environment

<https://integraatiot-ga.tyomarkkinatori.fi/>

### 3.1.1 Authentication to test environment

The user of the interface must provide the authentication token as part of the interface calls. For this, the token must first be obtained from Azure's AD B2C service.

### 3.1.2 Obtaining the token

The access token for the test environment is obtained from the following end point:

[https://tedigidevb2c.b2clogin.com/tedigidevb2c.onmicrosoft.com/B2C\\_1A\\_SIGNIN/oauth2/v2.0/token](https://tedigidevb2c.b2clogin.com/tedigidevb2c.onmicrosoft.com/B2C_1A_SIGNIN/oauth2/v2.0/token)

Required parameters

- "client\_id": "unique, user specific"
- "scope": "<https://tedigidevb2c.onmicrosoft.com/cd93ea6e-c118-4100-b2bd-5676e1ea4c50/default>"
- "client\_secret": "unique, user specific"
- "response\_type": "token"
- "grant\_type": "client\_credentials"

### 3.1.3 Using the token

The received access token must be added to the header of all REST calls of the interface

**Authorization: Bearer <token>**

### 3.1.4 Token validity period

3600 seconds (1 hour)

## 3.2 Production environment

<https://integraatit.tyomarkkinatori.fi/>

### 3.2.1 Production configurations

Access token end point:

[https://tedigib2c.b2clogin.com/tedigib2c.onmicrosoft.com/B2C\\_1A\\_SIGNIN/oauth2/v2.0/token](https://tedigib2c.b2clogin.com/tedigib2c.onmicrosoft.com/B2C_1A_SIGNIN/oauth2/v2.0/token)

Required parameters

- "scope": "<https://tedigib2c.onmicrosoft.com/e9343614-0f96-437e-9f5e-1d392e756675/default>"

## 4 Interface user and job poster

The import interface is designed in such a way that its user does not have to be the actual employer but can be used to advertise postings from several different job providers.

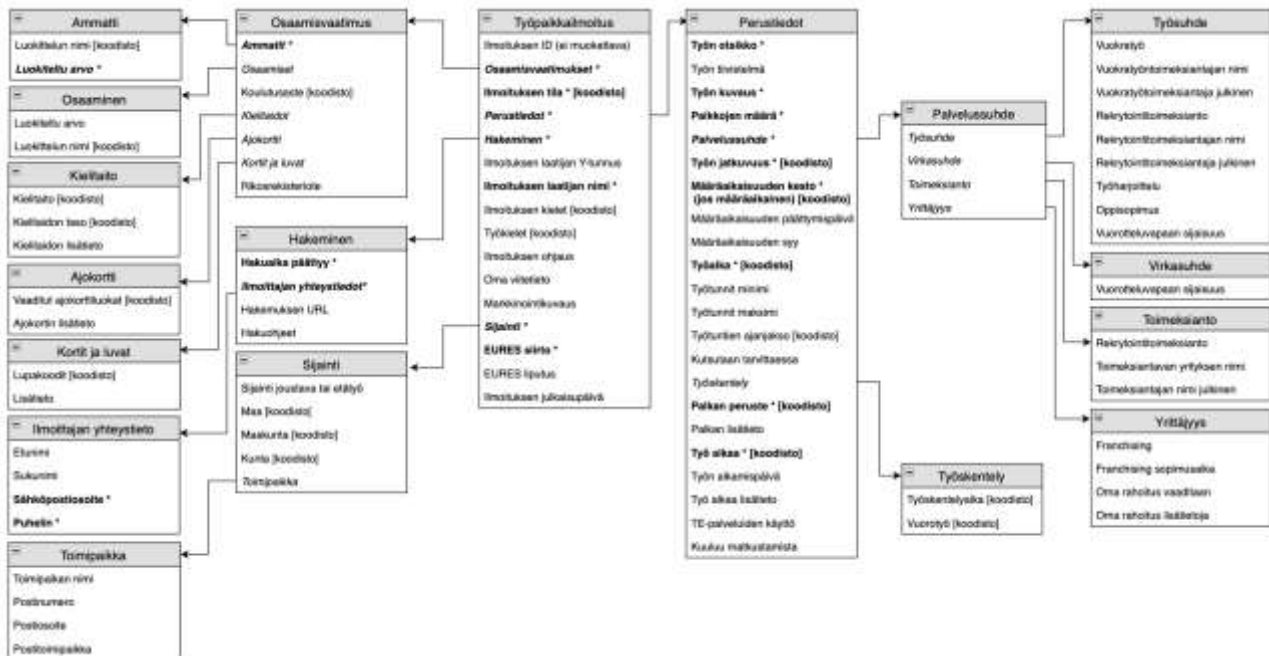
The interface user is referenced by using the parameter `IlmoittajanYTunnus` (PosterBusinessID). This information does not appear in the job posting to be published. The format of the Business ID is validated and in stage 1, non-Finnish Business IDs are not supported.

In addition to this, the **content** of the job posting records the employer, in whose name the job posting is displayed on Job Market Finland. The name and the possible Business ID of the employer to be displayed in the posting must be provided. The content of the job posting may also include the name of the principal in the case of a recruitment or temporary agency assignment.

All of the interface user's (`IlmoittajanYTunnus`) postings can be processed through the import interface, regardless of who the job poster is.

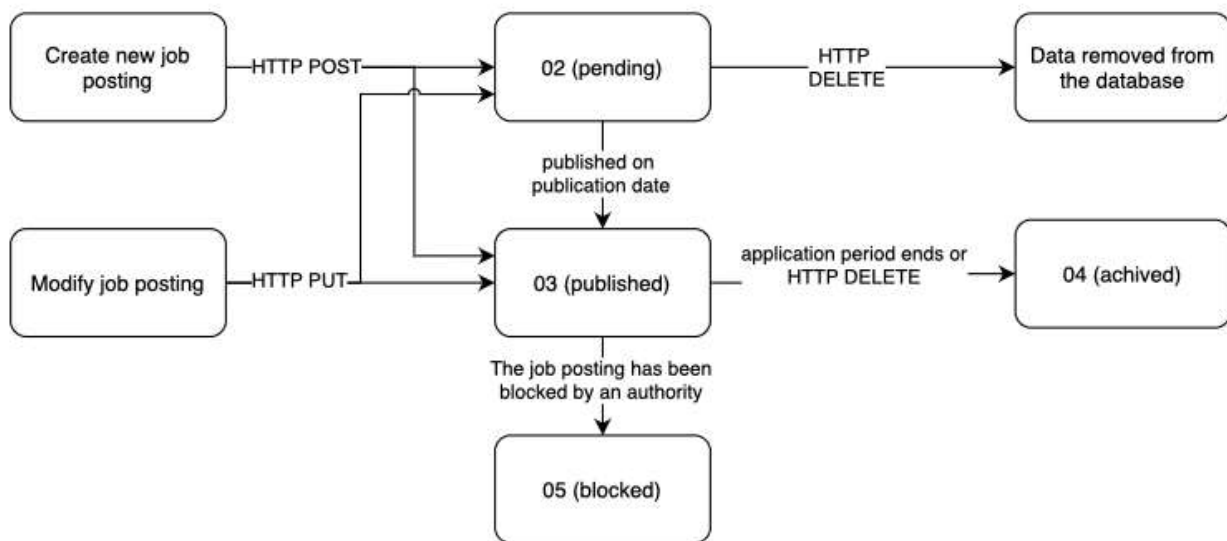
## 5 Interface entities

The interface entities form the model described below. More detailed descriptions of the entities can be found in the OpenApi description. Mandatory information is marked in the image with a tint.



## 5.1 Rules relating to entities

The status management of the job posting is handled according to the following figure. Postings can be imported either directly to a published state or to wait for publication at a specific time. A posting that has been published or is awaiting publication can be updated. Postings will be removed from publication after the application period has expired or can be deleted using the DELETE method. In both cases, the posting will be moved to an archived state and will no longer be public. If the job posting contains inappropriate content and an authority prevents its publication, the status of the posting will be changed to blocked and after that it can no longer be modified through the interface.



A job posting can be submitted in three languages and the languages used must be submitted using the `ilmoituksenKielet` attribute (`postingLanguages`). **The localized free text fields provided in the content should be validated** to include the translation elements in all of the languages of that are mentioned in the posting. If this is not the case, the posting will be rejected.

With regards to **professional knowledge**, it should be noted that job data are compiled for the Employment Service Statistics. However, only one occupation may be posted there, although the job posting allows for multiple occupations to be declared. For this reason, the profession used for the statistics on job posting imported through the interface is taken to be the **first element of the list of occupations**.

**Required skills at the workplace** are voluntary information. It would be advisable to fill in the skills required for the job, as they are used in the matching of jobs and job-search profiles. If required skills are not provided, the system automatically enters the essential skills associated with the main occupation in the ESCO ontology.

**Working languages** are voluntary information in the interface. If no separate working languages have been provided, the languages in which the posting has been posted interpreted as working languages (values of attribute `ilmoituksenKielet`)

The workplace must be given a **location**. The location may be flexible or telecommuting or a more accurate location. Both can be given.

If the **Contact details of the poster** element is used, a single contact information in the element must contain either a phone number or an email address.

## 6 Job posting creation

Creating a job posting through the interface is done using the HTTP protocol **POST** method. The job posting data content will be delivered in the content of the call in a `json` structure. The structure must match the structures in the OpenApi descriptions, and the mandatory fields are required.

In the call, the **Business ID of the company using the interface is entered as the poster**, not the Business ID of the company offering the job. This is important in order to be able to deal with jobs posted through the interface at a later stage.

### 6.1 Call

POST

**environment**/jobpostingapi/v1/ilmoittaja/{ilmoittajanYTunnus}/tyopaikkailmoitus

### 6.2 Example content

```
{
  "osaamisvaatimukset": {
    "ammatit": [
      {
        "luokiteltuArvo": "http://data.europa.eu/esco/occupation/3413f234-6230-47a8-8cc7-2691fd54ce3a",
        "luokittelunNimi": "ESCO"
      }
    ],
    "osaamiset": [
      {
        "luokiteltuArvo": "http://data.europa.eu/esco/skill/efe801a5-8704-4def-8a96-c32f7a6cb9fb",
        "luokittelunNimi": "ESCO"
      },
      {
        "luokiteltuArvo": "http://data.europa.eu/esco/skill/a65fb963-6faf-47b2-a3d9-c4e5e4d833c5",
        "luokittelunNimi": "ESCO"
      }
    ],
    "koulutusaste": "31",
    "kielitaidot": [
      {
        "kielitaito": "en",
        "kielitaidonTaso": "C1",
        "kielitaidonLisatieto": [
          {
            "kieliKoodi": "en",
            "arvo": "required en"
          },
          {
            "kieliKoodi": "fi",
            "arvo": "vaaditaan"
          },
          {
            "kieliKoodi": "sv",
            "arvo": "obligatorisk sv"
          }
        ]
      }
    ]
  },
  "ajokortti": {
    "vaaditutAjokorttiluokat": [
      "B",
      "B96BE",
      "C1C"
    ]
  }
}
```



```
"ajokortinLisatieto": [
  {
    "kieliKoodi": "en",
    "arvo": "Everything required"
  },
  {
    "kieliKoodi": "fi",
    "arvo": "Kaikki vaaditaan"
  },
  {
    "kieliKoodi": "sv",
    "arvo": "Allt obligatorisk"
  }
],
"kortitJaLuvat": {
  "lupaKoodit": [],
  "kortitJaLuvatLisatieto": [
    {
      "kieliKoodi": "fi",
      "arvo": "kortit-ja-luvat-lisatieto-fi"
    }
  ]
},
"rikosrekisteriote": false
},
"perustiedot": {
  "tyonOtsikko": [
    {
      "kieliKoodi": "en",
      "arvo": "kuvaava tyonotsikko en"
    },
    {
      "kieliKoodi": "fi",
      "arvo": "kuvaava tyonotsikko"
    },
    {
      "kieliKoodi": "sv",
      "arvo": "kuvaava tyonotsikko sv"
    }
  ],
  "tyonTiivistelma": [
    {
      "kieliKoodi": "en",
      "arvo": "Työn mainosteksti en"
    },
    {
      "kieliKoodi": "fi",
      "arvo": " Työn mainosteksti "
    },
    {
      "kieliKoodi": "sv",
      "arvo": " Työn mainosteksti sv"
    }
  ],
  "tyonKuvaus": [
    {
      "kieliKoodi": "en",
      "arvo": "tyonKuvaus englanniksi"
    },
    {
      "kieliKoodi": "fi",
      "arvo": "tyonKuvaus suomeksi"
    },
    {
      "kieliKoodi": "sv",
      "arvo": "tyonKuvaus ruotsiksi"
    }
  ],
  "paikkojenMaara": 10,
  "palvelussuhde": {
    "tyosuhde": {
      "vuokratyo": false,
      "vuokratyoToimeksiantaja": "",
      "vuokratyoToimeksiantajaJulkinen": false,
      "rekrytointiToimeksianto": true,
      "rekrytointiToimeksiantaja": "Supermahtava firmax",
    }
  }
}
```

```
    "rekrytointiToimeksiantajaJulkinen": true,
    "tyoharjoittelu": false,
    "oppisopimus": false,
    "vuorotteluvapaanSijaisuus": false
  }
},
"tyonJatkuvuus": "0202",
"maaraaikaisuudenKesto": "03",
"maaraaikaisuudenPaattymisPvm": "2022-08-05",
"maaraaikaisuudenSyy": [
  {
    "kieliKoodi": "en",
    "arvo": "määraaikaisuuden syy en"
  },
  {
    "kieliKoodi": "fi",
    "arvo": "määraaikaisuuden syy fi"
  },
  {
    "kieliKoodi": "sv",
    "arvo": "määraaikaisuuden syy sv"
  }
],
"tyoAika": "02",
"tyoTunnitMinimi": 0.0,
"tyoTunnitMaksimi": 60.0,
"tyoTunnitAjanjakso": "0202",
"kutsutaanTarvittaessa": true,
"palkanPeruste": "01",
"palkanLisätieto": [
  {
    "kieliKoodi": "en",
    "arvo": "palkkaa en"
  },
  {
    "kieliKoodi": "fi",
    "arvo": "palkkaa fi"
  },
  {
    "kieliKoodi": "sv",
    "arvo": "palkkaa sv"
  }
],
"tyoAlkaa": "02",
"tyoAlkaaPvm": "2022-12-07",
"tyoAlkaaLisätieto": [
  {
    "kieliKoodi": "en",
    "arvo": "voidaan joustaa sv"
  },
  {
    "kieliKoodi": "fi",
    "arvo": "voidaan joustaa"
  },
  {
    "kieliKoodi": "sv",
    "arvo": "voidaan joustaa sv"
  }
],
"tyoskentely": {
  "tyoskentelyAika": [
    "03",
    "06",
    "08"
  ],
  "vuorotyö": [
    "0802"
  ]
},
"tePalveluidenKaytto": true,
"kuuluuMatkustamista": true
},
"sijainti" {
  "sijaintiJoustava": false,
  "toimipaikka": {
    "toimipaikanNimi": [],
    "postinumero": "33100",
    "postiosoite": "Hämeenkatu 16",
```

```
    "postitoimipaikka": "Tampere"
  },
  "maa": [
    "FI"
  ],
  "maakunta": [
    "06"
  ],
  "kunta": [
    "837"
  ]
],
"hakeminen": {
  "hakuaikePaattyy": "2022-11-18T11:00:00Z",
  "ilmoittajanYhteystiedot": [
    {
      "etunimi": "Osmo",
      "sukunimi": "Setälä",
      "puhelinNro": "+358401234567",
      "sposti": "rekry@test.fi"
    }
  ],
  "hakemuksenUrlit": [
    {
      "kieliKoodi": "fi",
      "arvo": "https://tyomarkkinatori.fi/henkiloasiakkaat"
    },
    {
      "kieliKoodi": "sv",
      "arvo": "https://tyomarkkinatori.fi/sv/personkunder"
    },
    {
      "kieliKoodi": "en",
      "arvo": "https://tyomarkkinatori.fi/en/personal-customers"
    }
  ],
  "hakuohjeet": [
    {
      "kieliKoodi": "fi",
      "arvo": "hakuohjeet "
    },
    {
      "kieliKoodi": "sv",
      "arvo": "hakuohjeet sv"
    },
    {
      "kieliKoodi": "en",
      "arvo": "hakuohjeet en"
    }
  ]
},
"ilmoituksenTila": "03",
"ilmoittajanYTunnus": "2286193-6",
"ilmoittajanNimi": [
  {
    "kieliKoodi": "fi",
    "arvo": "Gapcon Oy"
  },
  {
    "kieliKoodi": "sv",
    "arvo": "Gapcon AB"
  },
  {
    "kieliKoodi": "en",
    "arvo": "Gapcon INC"
  }
],
"ilmoituksenKielet": [
  "fi",
  "sv",
  "en"
],
"tyokielet": [
  "fi",
  "en"
],
"ilmoituksenOhjaus": false,
"kotisivut": "",
```

```
"markkinointikuvaus": [
  {
    "kieliKoodi": "fi",
    "arvo": "mahtavaa markkinointikuvausta"
  },
  {
    "kieliKoodi": "en",
    "arvo": "mahtavaa markkinointikuvausta en"
  },
  {
    "kieliKoodi": "sv",
    "arvo": "mahtavaa markkinointikuvausta sv"
  }
],
"omaViite": "342",
"euresSiirto": true,
"euresLiputus": true,
"julkaisupvm": ""
}
```

## 6.3 Return

In response, a unique identifier (`uuid`) is provided for the created job posting, which allows the posting to be modified later.

Error conditions include (http status code):

- Invalid job posting (400)
- Data validation error (405)
- Internal error (500)

## 7 Job posting search

A job posting created in Job Market Finland can be searched for by using the posting identifier (returned in the creation call). The call is made by using the **GET** method of the `http` protocol. This ensures that the posting has been saved and verifies the accuracy of the data.

### 7.1 Call

GET

**environment**/jobpostingapi/v1/ilmoittaja/{ilmoittajanYTunnus}/tyopaikkailmoitus/{ilmoituksenID}

### 7.2 Example

<https://integraatiot.tyomarkkinatori.fi/jobpostingapi/v1/ilmoittaja/7022110-8/tyopaikkailmoitus/6f176641-1ff5-49ec-b4aa-07e860ed090f>

### 7.3 Return

The requested job posting (status code 200).

Error conditions include (http status code):

- Invalid job posting (400)
- Posting not found (404)
- Data validation error (405)
- Internal error (500)

## 8 Job posting search using Business ID of the job posting employer

Job postings created at Job Market Finland can be searched for by using the Business ID of the employer in the job posting. The call is made by using the **GET** method of the `http` protocol.

### 8.1 Call

GET

**environment**/jobpostingapi/v1/ilmoittaja/{ilmoittajanYTunnus}/tyopaikkailmoitus?ilmoituksenYTunnus={ilmoituksenYTunnus}

### 8.2 Example

`https://integraatiot.tyomarkkinatori.fi/jobpostingapi/v1/ilmoittaja/7022110-8/tyopaikkailmoitus?ilmoituksenYTunnus=0109862-8`

### 8.3 Return

The list of job postings by the requested employer (status code 200).

Error conditions include (http status code):

- Invalid job posting (400)
- Posting not found (404)
- Data validation error (405)
- Internal error (500)

## 9 Job posting modification

A job posting created in Job Market Finland can be modified by using the posting identifier (returned in the creation call). The modification is done by using the **PUT** method of the `http` protocol. The complete data content of the modified job posting will be delivered in the content of the call in a `json` structure. The structure must match the structures in the OpenApi descriptions, and the mandatory fields are required.

### 9.1 Call

PUT

**environment**/jobpostingapi/v1/ilmoittaja/{ilmoittajanYTunnus}/tyopaikkailmoitus/{ilmoituksenID}

### 9.2 Return

Information about a successful edit is returned (status code 200).

Error conditions include (http status code):

- Invalid job posting (400)
- Posting not found (404)

- Data validation error (405)
- Internal error (500)

## 10 Job posting removal

A job posting created in Job Market Finland can be removed by using the posting identifier (returned in the creation call). The remove function does not actually delete the report from the database, but marks it as archived, so it is no longer available in the Job Market Finland service. The deletion is carried out by using the **DELETE** method in the `http` protocol.

### 10.1 Call

`DELETE`

`environment/jobpostingapi/v1/ilmoittaja/{ilmoittajanYTunnus}/tyopaikkailmoitus/{ilmoituksenID}`

### 10.2 Return

Information about a successful removal is returned (status code 200).

Error conditions include (http status code):

- Invalid job posting (400)
- Posting not found (404)
- Internal error (500)

## 11 Code sets used in the interface

### 11.1 Driver's license (vaaditutAjokorttiluokat)

The code set describes the most common categories of driver's licences, which are grouped as follows.

Code	Description
A1A2A	A1, A2 or A (motorcycle)
B	B (passenger car)
B96BE	B96 or BE (trailer combination)
C1C	C1 or C (truck)
C1ECE	C1E or CE (truck and trailer)
D1D	D1 or D (bus)
D1EDE	D1E or DE (bus and trailer)

### 11.2 Occupation (ammatti.luokiteltuArvo)

Code set used in the classification of occupations. Currently only the ESCO code set is supported.

Code	Description
ESCO	ESCO occupations classification

### 11.3 Posting status (ilmoituksenTila)

Code set for describing the status of the job posting.

Code	Description
02	Pending – The job posting has been posted for publication but is waiting for a future publication date
03	Published – The job posting has been published in the service
04	Archived - The job posting has ended and it has been archived
05	Blocked - The job posting has been blocked by an authority

#### 11.4 Language (kielitaito and työkielet)

The language code set used is that of ISO 639-1. This code set is used to indicate working languages and separate language skills. In addition to these, the following ISO 639-2 and 639-3 codes are used.

Code	Description
ber (639-2)	Berber languages
rom (639-3)	Romany
smn (639-2)	Inari Sami
sms (639-2)	Skolt Sami
und (639-2)	Undetermined
crn (639-3)	Montenegrin
fse (639-3)	Finnish Sign Language
fss (639-3)	Finnish-Swedish Sign Language

#### 11.5 Level of language skills (kielitaidon taso)

Code set for indicating the required level of language proficiency. The code set is based on the Common European Framework of Reference for Languages (CEFR).

Code	Description
A1	Basics
B1	Satisfactory
B2	Good
C1	Very good
L1	Native language

#### 11.6 Licenses and permissions (lupa-koodit)

Professional cards and permits in use in Finland

Code	Description
001	A/T certification, Qualification in antenna systems
002	ADR driving license
003	Engineer officer's certification
004	First-Aid Fire Extinguishing certificate AS1

005	Liquor license
006	ARPA course (Automatic radar plotting aid)
007	Asbestos removal licence
008	Degree in document management and archival work
009	Licensed real estate agent, LKV
010	A/T certification, Qualification in antenna and network systems
011	Authorised translator
012	BRM course (Bride resource management)
013	First aid 1
014	First aid 2
015	Special load traffic controller degree - EKL
016	GOC course (General Operator's Certificate)
017	Professional driving permit for passenger cars
018	Man lift safety card
019	Lift safety examination
020	Welding qualifications/classifications
021	HTM-Auditor degree
022	Hygiene card
023	Age limit certificate
024	IMGD course
025	Skipper's certificate for the Baltic Sea
026	JHTT-Auditor degree
027	Security steward license
028	Gas spray permit
029	Gas carrier safety course
030	Able seafarer's certification
031	Hot work on roof card
032	Chemical tanker safety course
033	KHT-Auditor degree
034	Cook steward's certification
035	Engine attendant's certification
036	Second engineer officer's certification
037	Motorman's certification
038	Watchkeeping rating's engine certification
039	Repairman's certification
040	Skipper's certificate for domestic trade
041	Professional driver qualification card
042	Boatmaster's certificate I
043	Boatmaster's certificate II
044	Ship's steward certification
045	Ship's cook certification
046	Electro-technical rating's certification
047	Ship's waiter certification
048	Able seafarer's certification
049	Matupa - Tourism Safety pass
050	Master's certification



051	Wet room waterproofing certificate
052	Survival course
053	Rescue boat certificate of proficiency
054	First officer's certification
055	Ergonomic patient handling card
056	Pumpman's certification
057	Ordinary seaman's certification
058	Boatswain's certification
059	Pipeline license
060	Periodic inspector for fall protection equipment
061	Safety card for woodwork
062	Bridge crane licence
063	Health and social services safety card
064	STCW-95 Basic
065	Protection expert card
066	Inert gas system and crude oil washing course
067	Electro-technical officer's certification
068	Electrical safety certification 1, 2 and 3
069	Electrical safety card SFS 6002
070	Basic training for tanker operations
071	Taxi driving license
072	Road safety card 1 and 2
073	T certification, Qualification in network systems
074	Forklift truck card
075	Hot work card
076	Safety advisor training
077	Security officer license
078	Well-being at Work card
079	Occupational Safety Card
080	Dangerous Chemical Industrial Handling, inventory and Supervision
081	Dangerous goods (VAK or ADR training)
082	Transportation of dangerous goods by air, Basic Training (DGR)
083	Watchkeeping engineer's certification
084	Watchkeeping rating's certification
085	Deck officer's certification
086	Guard's license
087	Water hygiene card
088	Water work card
089	Licensed housing rental agent, LVV
090	General diploma in insurance, VTS
091	Dual purpose crew, Electro-technical rating, Certificate of competency
092	Advanced diploma in insurance, YVTS
093	Chief engineer officer certificate
094	Chief officer certificate
095	Oil tanker safety course

## 11.7 Level of education (koulutusaste)

Code set for describing the level of education. The code set is compatible with the national code set for levels of education.

Code	Description
31	Upper Secondary School
32	Vocational Education
4	Specialist qualification level
5	Short-cycle tertiary level
6	Bachelor's level
7	Master's level
8	Third cycle level

## 11.8 Municipality (kunta)

The code set for the location municipal data is the municipal numeric codes according to Statistics Finland's [Municipalities 2022](#) classification.

## 11.9 Country (maa)

The code set for the country data for the location is the numeric codes according to [ISO 3166](#).

## 11.10 Region (maakunta)

The code set for the location regional data is the regional numeric codes according to Statistics Finland's [Regions 2022](#) classification.

## 11.11 Duration of fixed term (maaraaikaisuudenKesto)

Code set for describing the duration of fixed term employment.

Code	Description
01	1–11 days
02	11 days–1 month
03	1–3 months
04	3–6 months
05	6–12 months
06	over 12 months

## 11.12 Competence (osaaminen.luokiteltuArvo)

Code set for describing competence. Currently only the ESCO code set is supported.

Code	Description
ESCO	ESCO competences classification

## 11.13 Basis for salary (palkanPeruste)

Code set used to describe the job salary type.

Code	Description
01	Salary based on working hours (e.g. monthly salary)
02	Fixed salary, regardless of the time spent at work
03	Salary based on performance (e.g. commission)
04	In addition to a fixed salary, an agreement has been made on a performance-based component
05	In addition to a salary based on working hours, an agreement has been made on a performance-based component
06	Performance-based salary paid on the basis of the performance of a previously agreed work package.
07	Other salary type

#### 11.14 Work begins (tyoAlkaa)

The code set describes when the employment relationship will start.

Code	Description
01	Work will begin as soon as possible
02	Work will begin on the given day
03	Work will begin as mutually agreed upon

#### 11.15 Working hours (tyoAika)

The code set describes the working hours of the employment relationship.

Code	Description
01	Work is full-time
02	Work is part-time

#### 11.16 Continuity of work (tyonJatkuvuus)

Code set for describing how long the employment relationship is.

Code	Description
01	Employment relationship will continue until further notice
02	Employment relationship is fixed term
0201	Work is seasonal
0202	Work is summer work

#### 11.17 Working time (tyoskentelyAika)

The code set describes the working time of the employment relationship.

Code	Description
01	Work takes place during the day
02	Work takes place during the evening
03	Work takes place during the night
04	Work takes place in episodes
05	Working time is flexible
06	Work takes place on weekdays
07	Work takes place on weekends
08	Work takes place in shifts

### 11.18 Time period of working hours (työTunnitAjanjakso)

The code set describes the time period of the given working hours.

Code	Description
0201	Part-time hours are given per week
0202	Part-time hours are given per month

### 11.19 Shift work (vuorotyö)

Code set for describing what kind of shift work is involved.

Code	Description
0801	The work is done in two shifts
0802	The work is done in three shifts
0803	The work is done in four shifts
0804	The work is done in five shifts