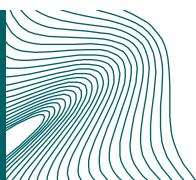


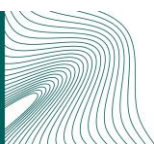
Instructions on supplying financial information to the financial information service for municipalities and processing information in the approval service



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1 General

The 'Financial information service for municipalities and counties' project is part of the development programme for the compilation of statistics on the financial information and data management of municipalities (Municipal Data programme) of the Ministry of Finance, which is aimed at developing the production and accessibility of the financial information required for decision-making within the municipality, as well as improving the cooperation between public administration operators in terms of functionality and information. At the end of the programme, municipalities and the government will be able to utilise the same jointly defined and automatically generated information to depict municipal finances in their own decision-making processes concerning municipalities.

The responsibility for collecting municipal financial information will be transferred from Statistics Finland to the State Treasury in 2021. Similarly, the State Treasury will be responsible for gathering financial information on counties. In addition, the tasks related to maintaining registers and reporting financial information will be performed by the State Treasury.

The 'Financial information service for municipalities and counties' project was started in autumn 2016 to carry out these responsibilities. The goal of the project is to build the operating models and systems required by the above-mentioned tasks to implement the process. The project is a part of implementing the measures defined in the Municipal Data programme.

1.1 The purpose of these instructions

The purpose of this document is to act as a guide to parties that supply financial information on municipalities and counties, and test the usage of the financial information transfer and approval service processes.

If you wish to supply material for these tests, you may contact the State Treasury at kuntadata@valtiokonttori.fi. You may also register with the approval service in advance, [see instructions in section 3.3.1](#).

2 General description of the service

The financial information service for municipalities and counties consists of several functions. The following is a detailed account of the individual functions in the order that the supplied information will be flowing through the service.

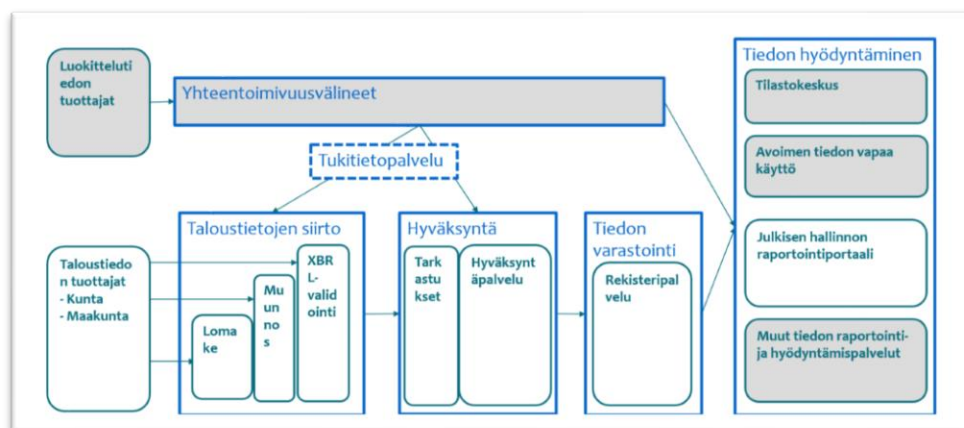


Image 1 Information flow process

2.1 Financial information transfer service

The financial information you are sending to the information service is first transferred to the financial information transfer service.

The material should preferably be in XBRL format, but it may also be delivered in CSV format. Any material in CSV format is run through a CSV converter, which converts the material to XBRL. After this, the CSV material is processed in the same way as XBRL material.

The materials are validated, i.e. inspected that they are in the right form, in connection with data transfers.

2.2 Approval service

The approval service collects the financial material from the transfer service. The results from the validation and the information on the sender have been attached to the material. At this stage, the financial information is also inspected in terms of content and the results of these observations are attached to the material. The material is transferred to the *Awaiting approval* data storage of the approval service.

Users appointed by the municipality and the county will receive an e-mail notification of the material received by the approval service (image below) at this stage. Users will also receive e-mail messages when a document awaiting approval has been approved.

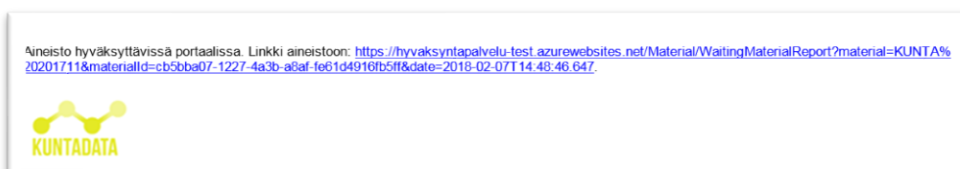


Image 2 Reception notification of delivered material

When the user signs in to the approval service, they are able to review the financial information of the organisations that their user ID has access to. Primarily, the user must review the accuracy of the material provided, i.e. check

that the material transferred to the service corresponds to the data complex that was sent.

In addition, content inspections are performed on the provided material, the findings of which are presented to the user in the approval service. The user must review these findings and comment on the reasons behind them.

Once the user has reviewed the inspection findings and found that the material is accurate, the data of the reporting complex can be approved for publication. Any comments related to the inspection findings will also be published along with the material, in order for the person utilising the information to better understand the content.

Here, you can browse approved material even after the material has been approved and published. After approval, the material is transferred to the *Approved* tab.

2.3 Registry service

The inspected and approved financial data is then transferred into the registry service, where it will be stored.

The registry service will feature an open interface, through which everyone has access to the financial information and the related comments. This enables anyone to search for information for their own purposes and to attach the information to their own reporting systems, for example. The data is available in several formats, such as json and XBRL.

2.4 Reporting service

The use of an open interface may not always be the easiest way to obtain published data. That is why financial data is also offered in the form of reports, tables, graphs, etc. through the reporting service.

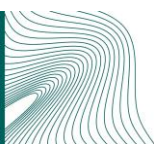
The reporting service is implemented as part of the analysis and reporting service for public administration (#Tietokiri). The reporting service is not in use as of yet, but it will be completed by 2019.

Further information on #Tietokiri can be found at www.tietokiri.fi

2.5 The support data service and the interoperability platform

The support data service is not directly visible to users, but it is necessary in terms of the operation of the service. The support data service contains the supporting information required by the functions and the maintenance, which it primarily retrieves from the interoperability platform, but also from other data producers, such as Statistics Finland, the National Institute for Health and Welfare (THL) or the Finnish National Board of Education.

The interoperability platform consists of commonly defined vocabularies, reference data and data streams, as well as data models required for data management. The XBRL taxonomy is also produced and retrieved to the support data service from the interoperability platform when it is finished. The XBRL taxonomy and other reference data produced can be freely retrieved to the user's own system from the software interface. The service is produced by the Population Register Centre.



Further information: <https://yhhteentoimiva.suomi.fi/en/>

3 Testing the information service

The financial information transfer service and the approval service are tested during the first phase.

3.1 What can be tested?

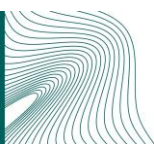
The tested material may be in the XBRL or CSV format, and it must be based on valid intermediate taxonomy. The material may cover the entire reporting complex, one section of the complex or a smaller part of a section of the complex (e.g. a section of the profit and loss account).

The current intermediate version of the taxonomy contains the external profit and loss account, financial statement and balance sheet, corresponding consolidated reports, as well as the budget and financial plan of the municipality or joint municipal authority. Other sections supported by the intermediate version include information supplementing the financial reports of municipalities or joint municipal authorities, the financial reporting of municipal companies, as well as the budget and financial plans of joint municipal authorities and their enterprises. Further information on the taxonomy is available [here](#).

3.1.1 Producing material in CSV format

The financial information transfer service is able to generate the necessary XBRL instance documents from the CSV file. Below is a description of the requirements and structure of the CSV format.

- The characters for CSV files in UTF-8
- CR, CRLF or LF are accepted as line feed characters
- Fields are separated by the semicolon (;)
- Fields containing special characters (the semicolon (;), line feed characters and the quotation mark (")) must be separated by using quotation marks (")
- No extra characters are allowed around the quotation marks, not even blank characters, e.g. OK: a;"b";c
- Quotation marks inside the field must be doubled, e.g.: "Eero ""Example"" Eerikäinen"
- In number fields, both the comma and the period may be used as decimal separators
- The formats "D.M.YYYY" or "YYYYMMDD" or "YYYY-MM-DD" are acceptable in date fields
- Number fields may not contain thousand separators, with the exception of the blank space and the non-breaking space
- The first line of the file is not read
- You cannot change the order of the fields.



```
taksonomiatunnus;organisaatiotyyppi;ytunnus;alkupvm;loppupvm;kenttatunnus;arvo
its-2018-01;kunta;0124610-9;1.1.2016;31.12.2016;1010002;298727464,4
```

taksonomiatunnus	organisaatiotyyppi	ytunnus	alkupvm	loppupvm	kenttatunnus	arvo
its-2018-01	kunta	0124610-9	1.1.2016	31.12.2016	1010002	298727464,4
its-2018-01	kunta	0124610-9	1.1.2016	31.12.2016	1010003	71608916,42
its-2018-01	kunta	0124610-9	1.1.2016	31.12.2016	1010004	110858448
its-2018-01	kunta	0124610-9	1.1.2016	31.12.2016	1010005	42298144,23
its-2018-01	kunta	0124610-9	1.1.2016	31.12.2016	1010006	73961955,76
its-2018-01	kunta	0124610-9	1.1.2016	31.12.2016	1010008	80559296,7
its-2018-01	kunta	0124610-9	1.1.2016	31.12.2016	1010009	-1369321808
its-2018-01	kunta	0124610-9	1.1.2016	31.12.2016	1010010	-491223924,5
its-2018-01	kunta	0124610-9	1.1.2016	31.12.2016	1010011	-377065340,5

Image 3 Example of CSV material

3.1.2 Producing material in XBRL format

The XBRL taxonomy is going to be completed in sections and published as intermediate versions until the final taxonomy is finished. The material sent must be based on the most recent taxonomy.

The intermediate versions are available for download on the State Treasury website at: <https://www.valtiokonttori.fi/en/service/the-financial-reporting-code-list/#the-xbrl-taxonomy-of-municipalities>

Standardized business reporting codes and classifications are available at: <https://koodistot.suomi.fi/registry;registryCode=sbr-fi-code-lists>

Once completed, the final taxonomy will be available at: <https://yhteentoimiva.suomi.fi/fi/>

Example material in XBRL format can be downloaded on the State Treasury website at: <https://www.valtiokonttori.fi/en/service/financial-information-service-for-municipalities-and-counties/#testing>

3.2 Supplying information

Test material can be sent in several ways.

3.2.1 Sending material via the website

Instructions on supplying information: <https://www.valtiokonttori.fi/en/service/financial-information-service-for-municipalities-and-counties/#testing>

Material uploading page: <https://sipaapigw.azure-api.net/usertest/index.html>

Image 4 Sending material via the website

The supplier's e-mail address is entered into the **User ID** field. This e-mail address is used to send a message confirming a successful upload. The **password** is not currently (test use) verified, but it must be entered into the field nevertheless. This means that you can enter anything in the password field.

3.2.2 Delivering the test material on an Excel form

The user manual below contains instructions on how to deliver municipal budget and financial data on the Excel form.

You can download the Excel form user manual here:

https://vk-wordpress-bucket-prod.s3-eu-west-1.amazonaws.com/uploads/sites/4/2019/02/Lomake_excel_k%C3%A4ytt%C3%B6hje_20190402_EN.pdf

3.2.3 Supplying information via the interface

Instructions on supplying information: <https://vk-wordpress-bucket-prod.s3-eu-west-1.amazonaws.com/uploads/sites/4/2018/11/Kuntatalouden-tietopalvelu-aineiston-vastaanoton-REST-rajapinnan-kuvaus.pdf>

3.2.4 Supplying information via the Suomi.fi interface

Instructions on supplying information via the Suomi.fi interface: <https://vk-wordpress-bucket-prod.s3-eu-west-1.amazonaws.com/uploads/sites/4/2018/11/Kuntien-talousaineistojen-lahettaminen-testipalveluvallassa.pdf>

Service Description Language -file:

<https://drive.google.com/file/d/1HQJSb7BAXDzblm6zFLyGrJnLDxM2Pxx/view>

3.3 What happens when the material has been supplied?

You will receive an e-mail notification of your material being transferred to the approval service in the e-mail account specified at the time of registration. The e-mail message will contain a link to the sign-in page of the approval service.

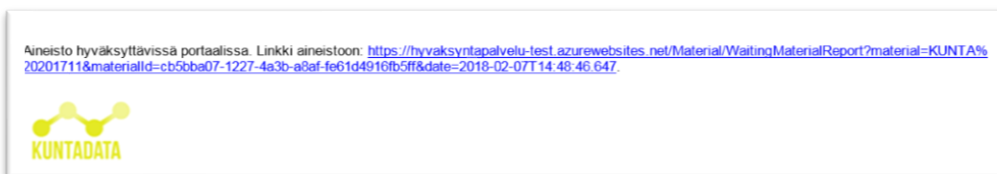


Image 5 E-mail notification of supplied material

3.3.1 Creating a user ID for the approval service

You must create a user ID for the approval service before you can gain access to the material you have sent. Please provide your e-mail address and the business ID of your municipality or county to: kuntadata@valtiokonttori.fi. The IT Centre for Science (CSC) will provide you with access rights to the service and send you an e-mail confirmation of the data being recorded.

After this, you may register in the online service by creating a user ID by using the e-mail address you provided and setting a password. You can register at <https://hyvaksyntapalvelu-usertest.azurewebsites.net/Account/Register>.

Image 6 Registering the user ID for the approval service

The e-mail address provided in connection with the registration must be verified in accordance with the instructions sent by the service. After activating the user ID, you can sign in to the approval service at <https://hyvaksyntapalvelu-usertest.azurewebsites.net/>.

Image 7 Approval service sign-in window

3.3.2 I have signed in to the approval service. What should I do?

You can now view the data you have sent. The approval service provides you with a view of the financial data of the municipality / joint municipal authority / county that the user ID registration entitles you to see. If you are the representative of an accounting firm, for example, you may have access rights to material provided by several organisations.

At this point, all the material in the service is test material that is not displayed to other organisations or published for public use via the open interface.

Thus far, the financial information will have undergone validations in the financial information transfer service to ensure that the material is in the correct format. In the first wave of testing, the data is not subjected to any further inspections. Financial material sent later will also be subjected to content inspections.

You should now review your material with the help of the various tabs in the approval service. The following is an illustrated guide to what you should do and which information you will be shown.

3.3.3 Approval service displays and content

When you sign in to the approval service, you will arrive on the entrance page, which contains general information on the content of the service and how to supply information. This page also includes a list of supplied reporting complexes that are waiting for inspection on the accuracy of the data contained within and the subsequent approval. You can select the material you want to view from the list of material waiting for approval which is located at the bottom of the page.

Hyväksyntää odottavat / Hyväksytyt	Laskelmat	Tarkastushavainnot	Instanssidokumentti
Valitse hyväksyntää odottavat ja listalla haluamasi raportointikokonaisuus, kun haluat tarkastella talousaineistoja, niihin kohdistuneita havaintoja ja lopulta käydä hyväksymässä raportointikokonaisuuden. Valitse hyväksytyt, kun haluat tarkastella jo hyväksytyjä raportointikokonaisuuksia.	Kun haluat käydä lävitse tarkastushavaintoja selkeillä raporteilla kuten tase, tulos- ja rahoituslaskelma.	Kokonaiskuva tarkastushavainnoista. Mahdollisuus suodattaa osakokonaisuuksittain.	Kokonaiskuva toimitetusta raportointikokonaisuudesta. Mahdollisuus suodattaa osakokonaisuuksittain.
Listattuna valittavana olevat raportointikokonaisuudet.	Tarkastushavainnot ovat kohdistettuna johonkin laskentatunnisteen osaan kuten lkp-tiliin. Sisältää myös tarkastushavaintojen tarkemmat selitteet.	Kaikki raportointikokonaisuuden tarkastushavainnot koottuna ja kohdistettuna havaintoa koskevaan solutunnisteeseen.	Tietopalveluun toimitettu raportointikokonaisuus tunnusluvullain.

Kuukausittain	Neljännesvuosittain	Vuosittain
LKP-tilien saldot	Tietoja kuntien, kuntayhtymien tulos- ja rahoituslaskelmien sekä taseen osista	Käyttötaloustiedot palveluluokittain ml. investoinnit

Lähetysaika	Raportointikokonaisuus	Ilmoittaja	Organisaatiotyyppi	Lähettaja
2018-04-17 6:40	Kuntien ja kuntayhtymien talousraportointi 2018	Espoo	kunta	jarmo.nieminen@csc.fi
2018-04-26 10:03	Kuntien ja kuntayhtymien talousraportointi 2015	Hartola	kunta	jarmo.nieminen@csc.fi

Image 8 Approval service entrance page

Next, the material you have selected will open on a report created with Power BI, which contains five tabs. You can select the tabs from the bottom of the report. The content of the report will be developed based on the feedback received from users who have used the test material.

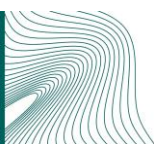
You can expand the report view by clicking the full screen icon at the bottom. You can exit the full screen view by pressing the Esc key on your keyboard.

- **Etusivu** (Frontpage) displays the quality of the supplied reporting complex at a glance. Based on this view, the user should be able to ensure that the supplied material has been transferred to the service correctly.
- The **Laskelmat tab** (Calculations) displays the supplied materials on clear reports.
- The **Tarkastushavainnot tab** (Inspections) displays the inspection findings generated by the content inspection of the material.
- The **Validoinnin tulokset tab** (Validation results) displays the technical information about validation
- The **Instanssidokumentti tab** (Instance document) lists the supplied financial information in a format in accordance with the taxonomy.

The **frontpage view** also displays the key figures of the supplied reporting complexes. This is intended to help check that the supplied information has been transferred to the approval service correctly, i.e. that it is the same information that was supplied.

This display also shows the number of fields that contain data in the supplied material in relation to the number of all possible fields. The purpose or goal is not to fill in all the fields, but only such fields in which the municipality/county has some content.

This display will later feature more information on the inspection findings that have come up in the course of the content inspection. This feature will be added later on.



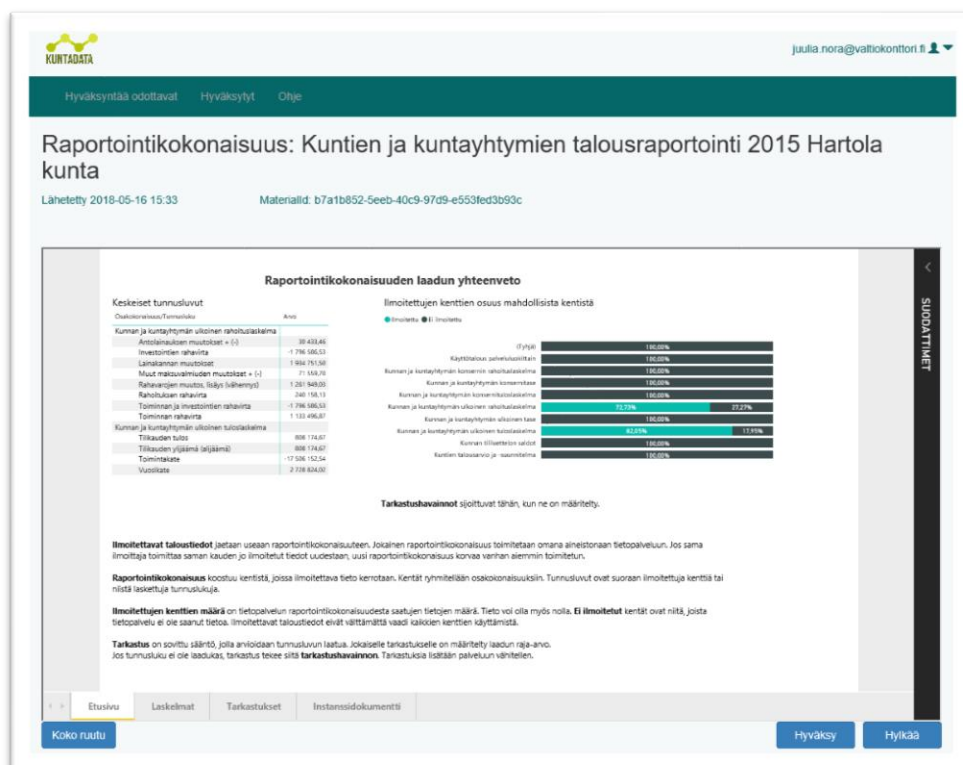
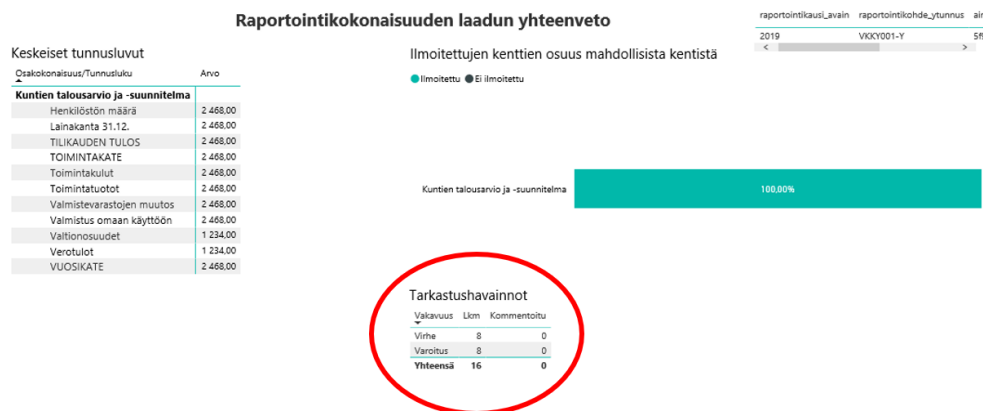


Image 9 Front page view

The frontpage view also displays the total number of findings generated by the calculation formulas.

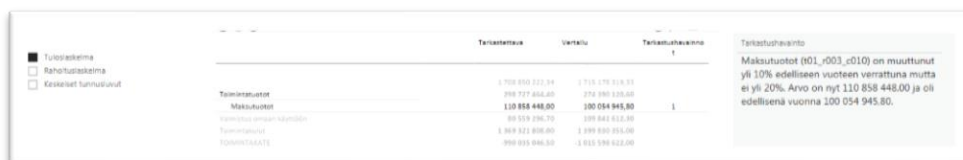


Kuva 10 The total number of findings generated by the calculation formulas.

You can view financial information as reports presented in graphs on the **Las- kelmat** tab. You can select the complex you wish to view by ticking the selection on the left hand side.

This view also displays the inspection findings related to the material (implemented later on), which you can read more about by clicking on the row that

the inspection finding pertains to. The purpose of this tab is to display financial information in a familiar format, which makes it easier to locate inspection findings in the supplied material.

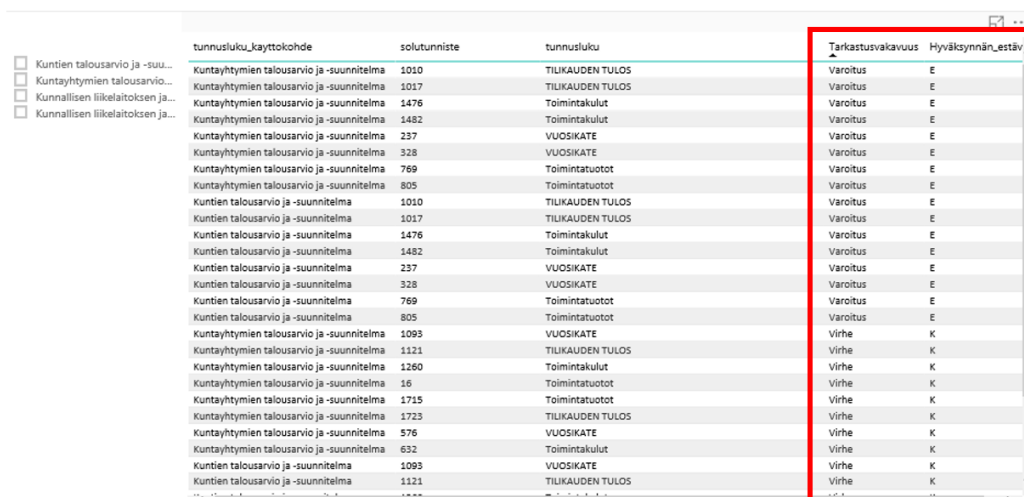


	Tarkastusvuosi	Vertailu	Tarkastusvuosi 1
Tuloasetelmat	1 700 800 312,04	1 710 170 318,01	
Rahotusasetelma	288 773 042,00	290 280 318,00	
Keskeiset tulotulot	130 858 448,00	100 054 945,80	1
Tuloslaskelman lisäselitys	80 059 096,70	100 043 012,00	
Tuloslaskenta	1 889 623 800,00	1 899 800 350,00	
Tuloslaskenta	899 059 946,00	1 833 590 022,00	

Image 11 The Laskelmat tab

The **Tarkastukset** tab highlight significant changes/anomalies in material from various periods of time. The Tarkastukset tab displays, in columns, the severity of the finding generated by the calculation formula and whether the finding is blocking approval (K / E)¹.

The tab will not display the entire material that was supplied, but it will only display the inspection findings generated by the calculation formulas. You can view further details of an individual inspection finding by clicking on the line that the finding pertains to.



tunnusluku_kayttokohtae	solutunniste	tunnusluku	Tarkastusvakavuus	Hyväksynnän_estäv.
Kuntien talousarvio ja -suunnitelma	1010	TILIKAUDEN TULOS	Varoitus	E
Kuntayhtymien talousarvio ja -suunnitelma	1017	TILIKAUDEN TULOS	Varoitus	E
Kuntayhtymien talousarvio ja -suunnitelma	1476	Toimintakulut	Varoitus	E
Kuntayhtymien talousarvio ja -suunnitelma	1482	Toimintakulut	Varoitus	E
Kuntayhtymien talousarvio ja -suunnitelma	237	VUOSIKATE	Varoitus	E
Kuntayhtymien talousarvio ja -suunnitelma	328	VUOSIKATE	Varoitus	E
Kuntayhtymien talousarvio ja -suunnitelma	769	Toimintatuotot	Varoitus	E
Kuntayhtymien talousarvio ja -suunnitelma	805	Toimintatuotot	Varoitus	E
Kuntien talousarvio ja -suunnitelma	1010	TILIKAUDEN TULOS	Varoitus	E
Kuntien talousarvio ja -suunnitelma	1017	TILIKAUDEN TULOS	Varoitus	E
Kuntien talousarvio ja -suunnitelma	1476	Toimintakulut	Varoitus	E
Kuntien talousarvio ja -suunnitelma	1482	Toimintakulut	Varoitus	E
Kuntien talousarvio ja -suunnitelma	237	VUOSIKATE	Varoitus	E
Kuntien talousarvio ja -suunnitelma	328	VUOSIKATE	Varoitus	E
Kuntien talousarvio ja -suunnitelma	769	Toimintatuotot	Varoitus	E
Kuntien talousarvio ja -suunnitelma	805	Toimintatuotot	Varoitus	E
Kuntayhtymien talousarvio ja -suunnitelma	1093	VUOSIKATE	Virhe	K
Kuntayhtymien talousarvio ja -suunnitelma	1121	TILIKAUDEN TULOS	Virhe	K
Kuntayhtymien talousarvio ja -suunnitelma	1260	Toimintakulut	Virhe	K
Kuntayhtymien talousarvio ja -suunnitelma	16	Toimintatuotot	Virhe	K
Kuntayhtymien talousarvio ja -suunnitelma	1715	Toimintatuotot	Virhe	K
Kuntayhtymien talousarvio ja -suunnitelma	1723	TILIKAUDEN TULOS	Virhe	K
Kuntayhtymien talousarvio ja -suunnitelma	576	VUOSIKATE	Virhe	K
Kuntayhtymien talousarvio ja -suunnitelma	632	Toimintakulut	Virhe	K
Kuntien talousarvio ja -suunnitelma	1093	VUOSIKATE	Virhe	K
Kuntien talousarvio ja -suunnitelma	1121	TILIKAUDEN TULOS	Virhe	K

Image 11 The Tarkastukset tab

Validoinnin tulokset tab

¹ K=Yes, E=No

validointi_koodi	validointi_taso	validointi_viesti
info		[] Kaavan xpath2-syntaksi alustettu 1.67 sekunnissa -
info	info	[info] ladattu 4.91 sekunnissa kohteessa 2019-06-12T06:47:56 - /var/data/br/instance/9f509bb-8ebc-4ebb-b0ed-f80d1700ae6_1560322075797.xml
info	info	[info] tarkistettu 3.54 sekunnissa - /var/data/br/instance/9f509bb-8ebc-4ebb-b0ed-f80d1700ae6_1560322075797.xml

Kuva 12 Validoinnin tulokset tab

Data definitions constructed based on the XBRL standard are called taxonomies. A report generated based on the taxonomy is called an instance document. You can view the XBRL files sent to the information service at the cell identity level on the **Instanssidokumentit** tab.

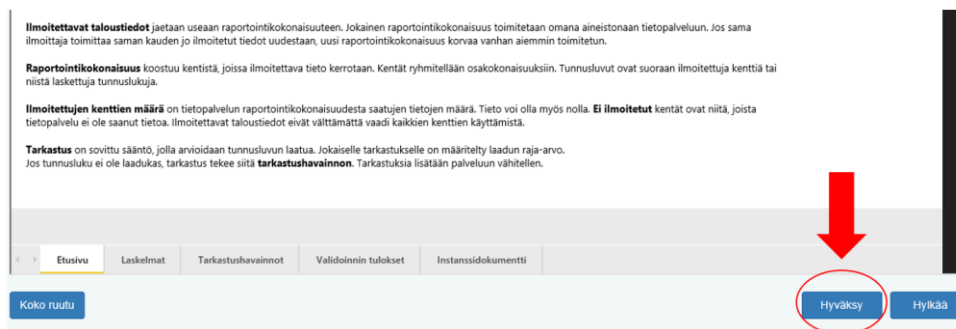
tunnusluku_kayttokoide	kenttatunnus	tunnusluku_ava	tunnusluku	arvo	tapa_ava
Kunnan ja kuntayhtymän ulkoinen tuloslaskelma	1010040	tk-01_1010040_c3	Tilikauden ylijäämä (alijäämä)	808 174,67	lahtotieto
Kunnan ja kuntayhtymän ulkoinen tuloslaskelma	1010039	tk-01_1010039_c3	Rahastojen muutos	0,00	lahtotieto
Kunnan ja kuntayhtymän ulkoinen tuloslaskelma	1010038	tk-01_1010038_c3	Varausten muutos	0,00	lahtotieto
Kunnan ja kuntayhtymän ulkoinen tuloslaskelma	1010037	tk-01_1010037_c3	Poistoeron lisäys tai (vähennys)	0,00	lahtotieto
Kunnan ja kuntayhtymän ulkoinen tuloslaskelma	1010036	tk-01_1010036_c3	Tilikauden tulos	808 174,67	lahtotieto
Kunnan ja kuntayhtymän ulkoinen tuloslaskelma	1010035	tk-01_1010035_c3	Satunnaiset kulut	0,00	lahtotieto
Kunnan ja kuntayhtymän ulkoinen tuloslaskelma	1010034	tk-01_1010034_c3	Satunnaiset tuotot	0,00	lahtotieto
Kunnan ja kuntayhtymän ulkoinen tuloslaskelma	1010033	tk-01_1010033_c3	Satunnaiset erät	0,00	lahtotieto
Kunnan ja kuntayhtymän ulkoinen tuloslaskelma	1010032	tk-01_1010032_c3	Arvonlennut	0,00	lahtotieto
Kunnan ja kuntayhtymän ulkoinen tuloslaskelma	1010031	tk-01_1010031_c3	Suunnitelman mukaiset poistot	-556 237,34	lahtotieto
Kunnan ja kuntayhtymän ulkoinen tuloslaskelma	1010030	tk-01_1010030_c3	Poistot ja arvonalentumiset	-556 237,34	lahtotieto
Kunnan ja kuntayhtymän ulkoinen tuloslaskelma	1010029	tk-01_1010029_c3	Vuosikate	1 364 412,01	lahtotieto
Kunnan ja kuntayhtymän ulkoinen tuloslaskelma	1010028	tk-01_1010028_c3	Muut rahoituskulut	-1 879,01	lahtotieto
Kunnan ja kuntayhtymän ulkoinen tuloslaskelma	1010027	tk-01_1010027_c3	Korkokulut	-178 095,18	lahtotieto
Kunnan ja kuntayhtymän ulkoinen tuloslaskelma	1010024	tk-01_1010024_c3	Muut rahoitustuotot	31 165,05	lahtotieto
Kunnan ja kuntayhtymän ulkoinen tuloslaskelma	1010023	tk-01_1010023_c3	Korkotuotot	11 525,77	lahtotieto
Kunnan ja kuntayhtymän ulkoinen tuloslaskelma	1010022	tk-01_1010022_c3	Rahoitustuotot ja -kulut	-137 283,37	lahtotieto
Kunnan ja kuntayhtymän ulkoinen tuloslaskelma	1010021	tk-01_1010021_c3	Valtionosuudet	8 788 591,00	lahtotieto
Kunnan ja kuntayhtymän ulkoinen tuloslaskelma	1010020	tk-01_1010020_c3	Verotulot	10 219 256,92	lahtotieto
Kunnan ja kuntayhtymän ulkoinen tuloslaskelma	1010019	tk-01_1010019_c3	Toimintakate	-17 506 152,54	lahtotieto
Kunnan ja kuntayhtymän ulkoinen tuloslaskelma	1010018	tk-01_1010018_c3	Muut toimintakulut	-282 860,48	lahtotieto
Kunnan ja kuntayhtymän ulkoinen tuloslaskelma	1010017	tk-01_1010017_c3	Avustukset	-280 476,69	lahtotieto

Image 13 The Instanssidokumentit tab

3.3.4 Commenting and approving the material

If the data is incorrect, it must be corrected on the source system and resend to the Financial information Service. A finding generated by the calculation

formula must be commented upon when the value is correct, but there is still a finding. Each remaining finding must be commented on before the material can be successfully approved.



Kuva 14 Approving the material

3.4 Retrieving data from the REST interface

Approved information that has been transferred to the register service is available via the REST interface in JSON and XML formats.

Searching for indicators via the REST interface is a two-step process.

1. First you must retrieve all of the material data available in the service.
2. Then the identifier data (business ID, reporting complex, etc.) for the results set can be used to select the correct material. The results set will already have a URL address that can be used to retrieve the indicators pertinent to that particular set.

The retrieval method will naturally depend on the application/browser used to retrieve the data.

3.4.1 REST interface address

The REST interface is located at: <https://kuntarestuserest.westeurope.cloudapp.azure.com/>.

When you access the address, you will see the view below with instructions on how to use the interface.

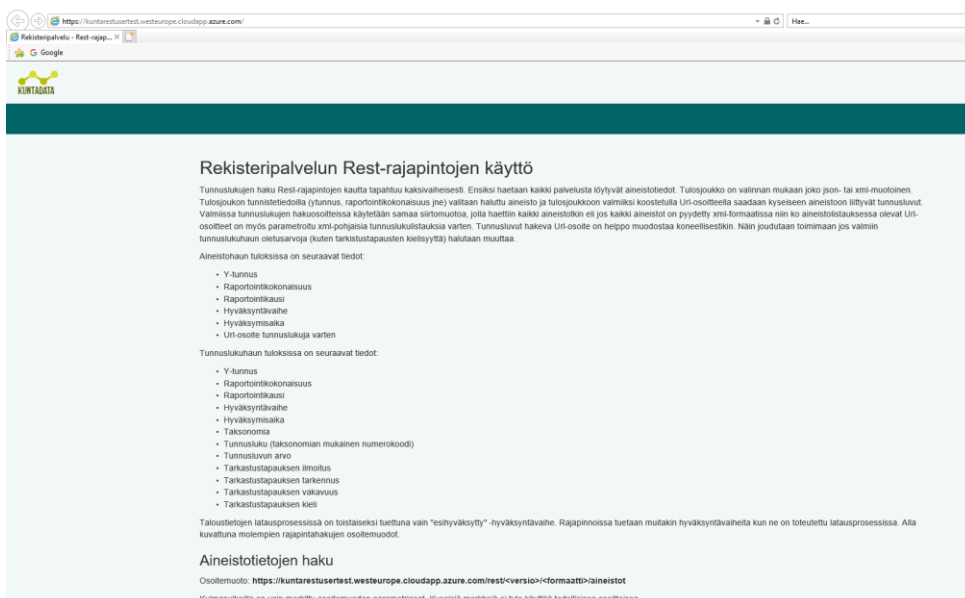


Image 156 The front page of the REST interface of the registry service

In production use, the information is available to everyone through the interface. For the time being, access to the user test environment (<https://kuntarestusertest.westeurope.cloudapp.azure.com/>) is restricted by a firewall. Please report your organisation's firewall IP address to the State Treasury via e-mail to kuntadata@valtiokonttori.fi in order to gain access to the test environment.

3.4.2 Material data retrieval and example searches

You can use the following parameters to search for material data:

- Version: v1
- Format: json or xml

Based on the above parameters, all of the material data found in the service can be retrieved in:

1. JSON format: <https://kuntarestusertest.westeurope.cloudapp.azure.com/rest/v1/json/aineistot>
2. XML format: <https://kuntarestusertest.westeurope.cloudapp.azure.com/rest/v1/xml/aineistot> .

Below you will find an example of the same material data search implemented with a few different applications.

Example 1. Searching for data in JSON format using the Firefox browser.

When you access the above address with the Firefox browser (<https://kuntarestusertest.westeurope.cloudapp.azure.com/rest/v1/json/aineistot>), you will see a text displayed in the JSON format

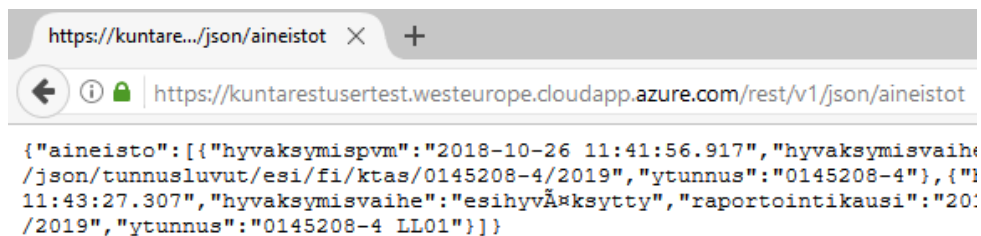


Image 17 Searching for data in JSON format using the Firefox browser.

The JSON format can also be displayed in a more readable manner by using add-ons available for the Firefox browser.

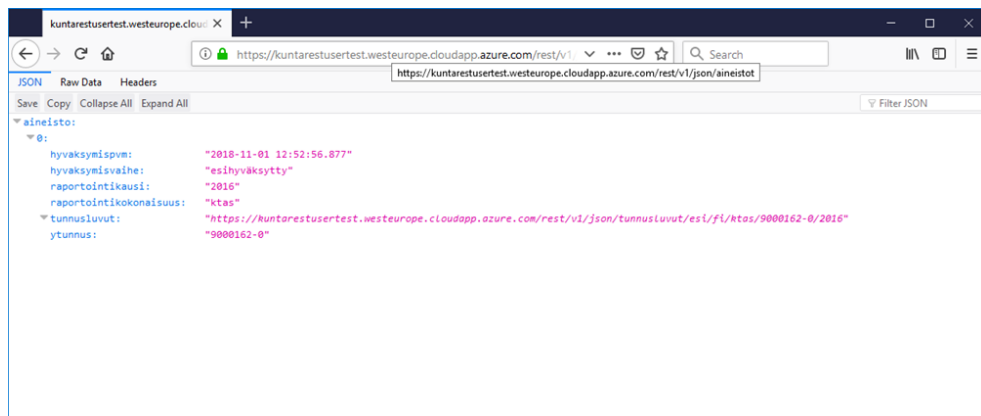


Image 18 Displaying the JSON format in a more readable manner.

Example 2. Searching for data in JSON format using the Internet Explorer browser.

Internet Explorer will prompt you to open the material data (aineistot.json) retrieved from the address using the workstation or save the material data onto the workstation.

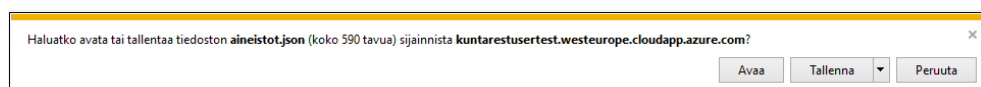


Image 19 Searching for data in JSON format using the Internet Explorer browser, download window.

After the search, the material data can be opened in a workstation application (e.g. notepad).

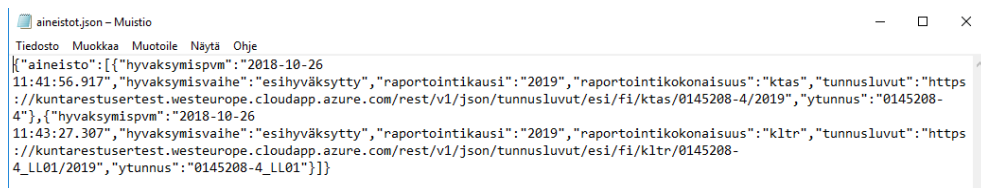


Image 20 Searching for data in JSON format using the Internet Explorer browser.

Example 3. Searching for data in JSON format using the SoapUI application.

You can retrieve material data using the following command:

GET <https://kuntarestusertest.westeurope.cloudapp.azure.com/rest/v1/json/aineistot> HTTP/1.1 .

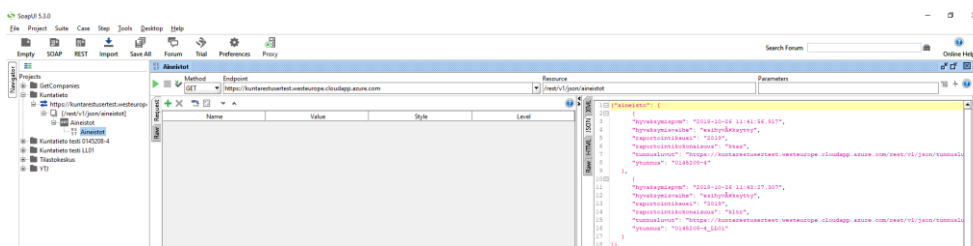


Image 21 Searching for data in JSON format using the SoapUI application.

3.4.3 Interpreting material data

Material data will contain information on all of the data in the registry service and the following information on each material set:

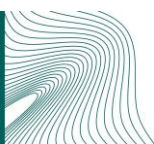
- Business ID (Y-tunnus)
- Reporting complex (Raportointikokonaisuus)
- Reporting period (Raportointikausi)
- Approval phase (Hyväksyntävaihe)
- Approval time (Hyväksyntäaika)
- URL for indicators (URL-osoite tunnuslukuja varten)

```
{
  "aineisto": [
    {
      "hyvaksymispvm": "2018-10-26 11:41:56.917",
      "hyvaksymisvaihe": "esihyväksytty",
      "raportointikausi": "2019",
      "raportointikokonaisuus": "ktas",
      "tunnusluvut": "https://kuntarestusertest.westeurope.cloudapp.azure.com/rest/v1/json/tunnusluvut/esi/fi/ktas/0145208-4/2019",
      "ytunnus": "0145208-4"
    },
    {
      "hyvaksymispvm": "2018-10-26 11:43:27.307",
      "hyvaksymisvaihe": "esihyväksytty",
      "raportointikausi": "2019",
      "raportointikokonaisuus": "kltr",
      "tunnusluvut": "https://kuntarestusertest.westeurope.cloudapp.azure.com/rest/v1/json/tunnusluvut/esi/fi/kltr/0145208-4_LL01/2019",
      "ytunnus": "0145208-4_LL01"
    }
  ]
}
```

Hyväksymisaika
Hyväksyntävaihe
Raportointikausi
Raportointikokonaisuus
Url-osoite tunnuslukuja varten
Y-tunnus

Image 22 Interpreting material data.

The example search above shows that the test environment registry service contains (13 December 2018) two pre-approved test material sets, one of which belongs to the business ID 0145208-4 and the other to the enterprise 0145208-4_LL01 under the business ID.



3.4.4 Searching for indicators belonging to a certain material set

Searching for material data was illustrated above. The identifier data (business ID, reporting complex, etc.) for the results set can be used to select the correct material. The results set will already have a URL address that can be used to retrieve the indicators pertinent to that particular set.

The finished indicator search addresses use the same mode of transfer that was used to retrieve all of the material. If all of the material was requested in the JSON format, the URL addresses in the material listing in question have also been parameterised for the JSON-based indicator listings. The URL address for retrieving indicators can also be formed automatically. This is the procedure if the parameters (such as the language of the verifications) of the finished indicator search need to be changed.

You can use the following parameters to search for material indicators:

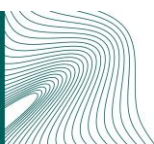
- Version: v1
- Format: json, xml
- Approval phase: pre-approval, final. (At the moment, the downloading process only supports pre-approved material sets.)
- Language: fi, en, sv. The language ID is used to select the language for the verifications related to indicators.
- Reporting complex: ktas, kkytt, kkotr, kknr, kyltas, kktr, oytp, kltr, etc.
- The business ID is the business ID of the municipality: 0145208-4, for example.
- Period: 2016, 2017, etc.

Example 1. Searching for material indicators.

The above search for material data found two material sets in the registry service. The addresses for these material sets for the purposes of indicator searches are as follows

- <https://kuntarestuseritest.westeurope.cloudapp.azure.com/rest/v1/json/tunnusluvut/esi/fi/ktas/0145208-4/2019>
- https://kuntarestuseritest.westeurope.cloudapp.azure.com/rest/v1/json/tunnusluvut/esi/fi/kltr/0145208-4_LL01/2019

If you access the first address now, you will be presented with the material belonging to business ID 0145208-4.



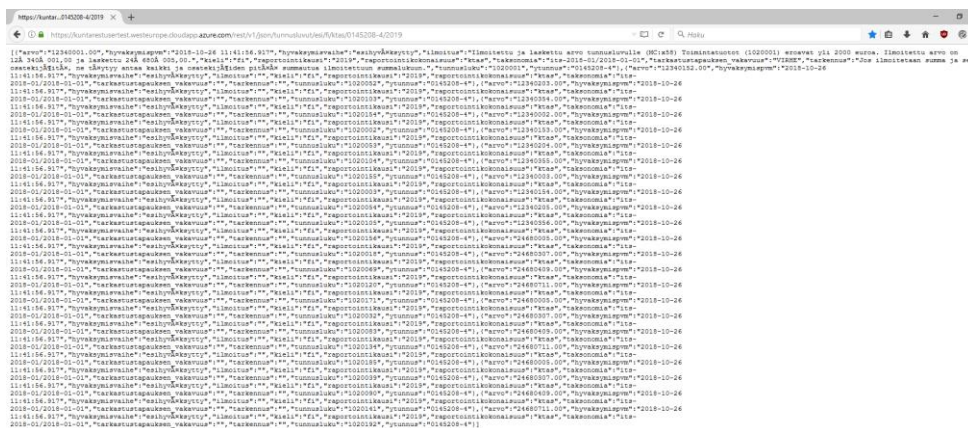


Image 23 Searching for material indicators.

3.4.5 Interpreting indicators belonging to a certain material set

The following information is available in the indicator search results:

- Business ID
- Reporting complex
- Reporting period
- Approval phase
- Approval time
- Taxonomy
- Indicator (numerical code in accordance with the taxonomy)
- Indicator value
- Verification notification
- Verification specification
- Verification severity
- Verification language

Below you will find the data of one example observation.

```
{
  "arvo": "12340001.00",
  "hyvaksymispaiva": "2018-10-26 11:41:56.917",
  "hyvaksymisyksikko": "eshhyvaksy",
  "ilmoitus": "Ilmoitettu ja laskettu arvo tunnustaville (MC:x58) Toimintatutot (1020001)",
  "kieli": "fi",
  "raportointikausi": "2019",
  "raportointikokonaisuus": "kts",
  "taksonomia": "its-2018-01/2018-01-01",
  "tarkastuspauksen_vakavuus": "VIRHE",
  "tarkennus": "Jos ilmoitetaan summa ja sen osatekijät, se täytyy antaa kaikki ja osa",
  "tunnusluku": "1020001",
  "ytunnus": "0145208-4"
}
```

Image 24 Example observation indicators.

For the time being (30 July 2019), the downloading of financial data only supports the “pre-approved” approval phase. The interfaces also support other approval phases if they are implemented in the downloading process.

4 Stakeholders, dependencies and other systems/issues related to the service

Service target groups include parties supplying and utilising financial information. The service is being developed in cooperation with a large network of stakeholders.



4.1 Information suppliers

Municipalities, joint municipal authorities, unincorporated municipal enterprises and other balance sheet units may supply financial information. In addition, information is supplied by parties providing services for the parties mentioned above, such as accounting firms and IT suppliers.

4.2 Information end users

The financial information can be utilised via the registry service and the reporting service maintained by the State Treasury. The identified information end users are listed below.

- Ministry of Finance
- Statistics Finland
- Municipalities and counties
- The Association of Finnish Local and Regional Authorities
- The Finnish National Board of Education
- The National Institute for Health and Welfare
- Ministry of Economic Affairs and Employment
- Ministry of Education and Culture
- State Treasury

4.3 Systems and other services related to the service

- Municipal financial information systems
- Information systems of the authorities maintaining the support information
- National interoperability tools
- Data further processing services
- The Suomi.fi National Data Exchange Layer

In addition, the service utilises code sets that are maintained in the service managed by the Population Register Centre (yhteentoimiva.suomi.fi).

4.4 Public administration recommendations (JHS recommendations)

In the future, public administration recommendations are used to control the external financial reporting of municipalities. The validity of these recommendations, updated annually, is currently being examined. It is very likely that municipalities, joint municipal authorities and counties will be required to employ JHS recommendations based on a decree. The key JHS recommendations concerning finances and financial reporting are:

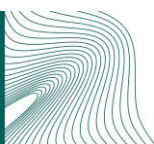
- account catalogue ("tililuettelomalli", the account catalogue model)
- XBRL taxonomy
- budget and financial plan
- financial information reports
- cost accounting
- service classifications

4.5 XBRL

XBRL (eXtensible Business Reporting Language) is an XML-based markup language for the presentation of financial information, e.g., financial statements in an electronic, structured format. XBRL enables the automated formation, processing and further processing of documents containing financial information.

The parties producing, transmitting and analysing data can benefit from documents in XBRL format as the availability and quality of data is improved. The goal is to reduce errors in the interpretation and recording of data and to make information available more quickly through the reduction of manual labour.

The financial information supplied to the financial information service for municipalities should primarily be supplied to the Financial information transfer service in XBRL format. The taxonomy is going to be completed in sections, and the financial information supplied must always comply with the most recent taxonomy. [You can see further information and download a partial publication of the XBRL taxonomy here.](#)



4.6 Glossary

TERM	DEFINITION
Support data	The definition of a collection of support records pertaining to a certain theme in table format
Support record	A data set containing one or more columns corresponding to the definition of support data
Reporter	A municipality, a joint municipal authority or a balance sheet unit with the obligation to report
Supplier	The supplier is the party sending the information
Approver	The approver is the party that has approved the information in the approval service
Taxonomy	Name of the taxonomy
Taxonomy identifier	Identifier assigned to a taxonomy
Reporting complex	Part of a taxonomy
Section	Part of a reporting complex
Organisation type	Type of the reporter's organisation
Field identifier	Identifier assigned to a field
Field	Name of field
Account identifier	Account identifier in operational economy reporting
Account	Account name in operational economy reporting
Service classification identifier	Service classification identifier in operational economy reporting
Service classification	Name of service classification in operational economy reporting
Service group	Umbrella concept for service classifications
XBRL	eXtended Business Reporting Language
XBRL taxonomy	Data content and format agreed in accordance with XBRL
XBRL entry point	Part of the XBRL taxonomy
Instance document	An XBRL file sent to the information service

5 Contact information

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6 Change history

Version	Date	Author	Reviewer	Approved by	Change history
V 0.1	14 March 2018	Juulia Nora			
V 0.2	21 March 2018	Juulia Nora			Observations from the comment round introduced.
V 0.3	5 April 2018	Juulia Nora			Changes defined in the workshop introduced.
V 0.4	15 May 2018	Anne Melanen			Texts completed.
V 0.5	15 May 2018	Juulia Nora	Anne Melanen, Jarmo Nieminen		Mistakes corrected, added text and formatting.
V 1.0	22 May 2018	Juulia Nora		Anne Melanen	Changed order of chapters 2 and 3.
V 1.1	28 June 2018	Juulia Nora			Rectified dates.
V 1.2	5 July 2018	Juulia Nora			Updated information on taxonomies.
V 1.4	30 July 2019	Antti En			Text added. Updated website links.

