

Estonian reporting mapping and a new model for reporting in real-time economy

Summary of the results of Estonian Ministry of Economic Affairs and Communications procurement No 231015

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Project objectives

Mapping of reporting obligations set by Estonian state agencies.

Data-driven and XBRL GL standard-based reporting model business analysis, resulting in a new reporting model and its roadmap for more efficient reporting set by state authorities.

Introduction of the international data exchange standard eXtensible Business Reporting Language Global Ledger (XBRL GL) on the example of packaging reporting and fuel reporting.

Project participants

Agencies, private companies, contracting authority and contractors

All Estonian ministries and agencies were involved.

Additionally the Estonian Financial Supervision and Resolution Authority, Center of Registers and Information Systems, entrepreneurs, including ERP providers.

The contracting authority:
the Ministry of Economic Affairs and Communications

Contractors:
Tieto Estonia AS,
subcontractor
Skrining OÜ.

Project activities

Carried out in cooperation by all participants between April 2021 and September 2021

Online survey on reporting

What is the reporting obligation imposed by authorities?

Document analysis

Mapping elaborations based on legislation.

Compilation of a model and a roadmap

What is the new reporting model and how can it be implemented?

Fuel and packaging reporting analysis

How to implement mentioned reporting on XBRL GL?

Perspective

Interest in reporting development

Companies providing software services(e.g ERP providers) are primarily interested in the development and automation of reporting systems, and with the respective developments they can reduce the costs related to the preparation and transmission of their clients reports - less handiwork in the future.

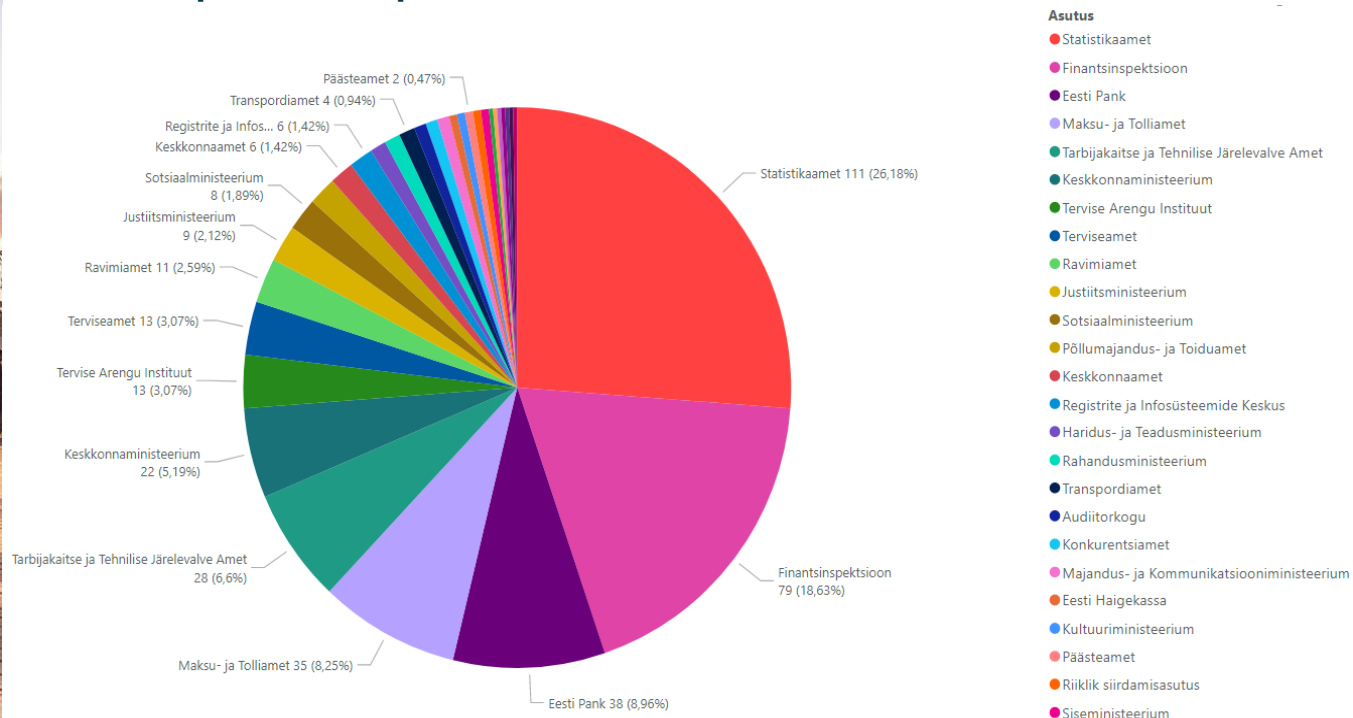


Perspective

Using an ERP service provider, there are more companies behind one development and one X-Road connection at the same time, which helps to save costs.

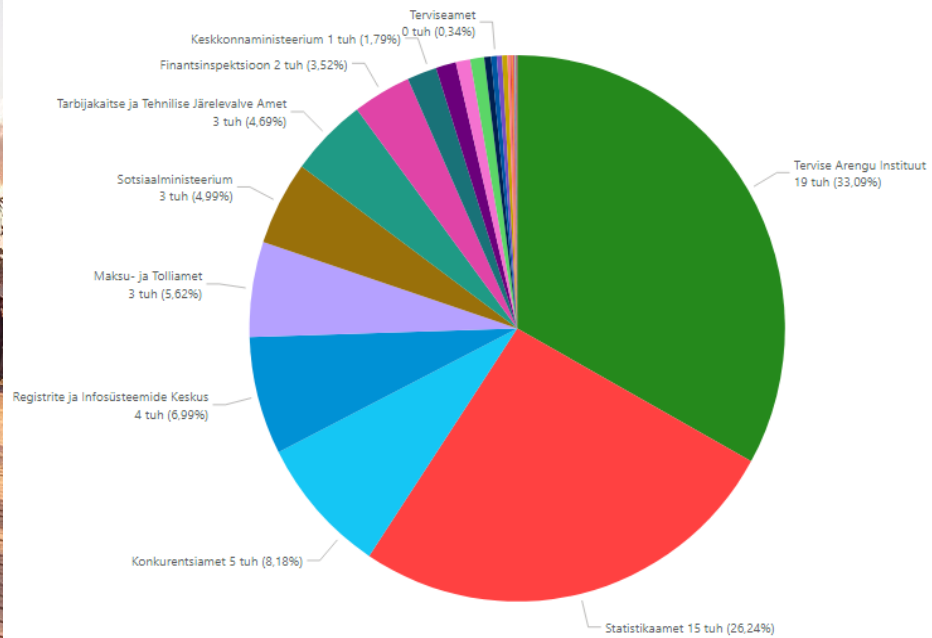


Number of reports by recipients of reports





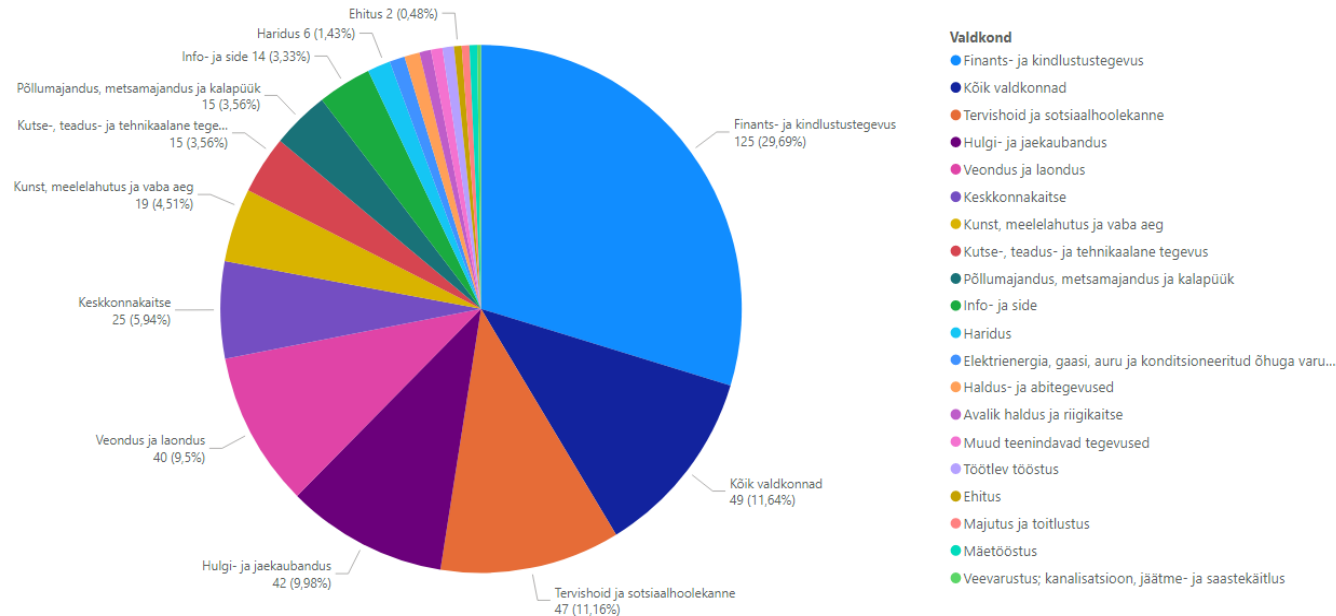
Number of report data fields by report recipients



- Asutus**
- Tervise Arengu Instituut
 - Statistikaamet
 - Konkurentsiamet
 - Registrite ja Infosüsteemide Keskus
 - Maksu- ja Tolliamet
 - Sotsiaalministeerium
 - Tarbijakaitse ja Tehnilise Järelevalve Amet
 - Finantsinspeksioon
 - Keskonnaministeerium
 - Eesti Pank
 - Majandus- ja Kommunikatsiooniministeerium
 - Raviamet
 - Transpordiamet
 - Terviseamet
 - Haridus- ja Teadusministeerium
 - Põllumajandus- ja Toiduamet
 - Päästeamet
 - Keskonnaamet
 - Riiklik siirdamisasutus
 - Eesti Haigekassa
 - Välisministeerium
 - Rahandusministeerium
 - Maa-amet
 - SA Erametsakeskus
 - Sotsiaalkindlustusamet



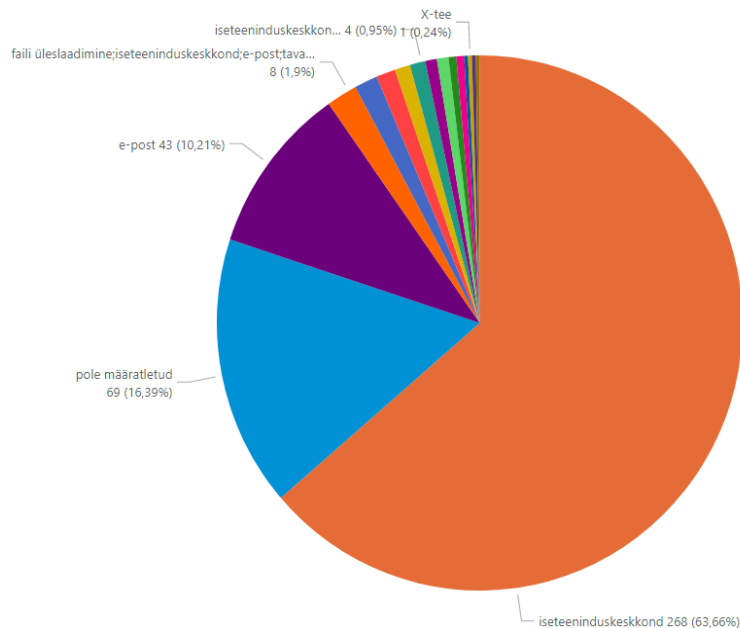
Number of reports by field of activity of the rapporteur



- Valdkond**
- Finants- ja kindlustustegevus
 - Kõik valdkonnad
 - Tervishoid ja sotsiaalhoolekanne
 - Hulgi- ja jaekaubandus
 - Veondus ja laondus
 - Keskkonnakaitse
 - Kunst, meelelahutus ja vaba aeg
 - Kutse-, teadus- ja tehnikaalane tegevus
 - Põllumajandus, metsamajandus ja kalapüük
 - Info- ja side
 - Haridus
 - Elektrienergia, gaasi, auru ja konditsioneeritud õhuga varu...
 - Haldus- ja abitegevused
 - Avalik haldus ja riigikaitse
 - Muud teenindavad tegevused
 - Töötlev tööstus
 - Ehitus
 - Majutus ja toitlustus
 - Mäetööstus
 - Veevarustus; kanalisatsioon, jäätme- ja saastekäitlus



Proportion of reporting opportunities by number of reports



Kanal

- iseteeninduskeskkond
- pole määratletud
- e-post
- faili üleslaadimine; iseteeninduskeskkond; e-post; tavapost; k...
- X-tee; iseteeninduskeskkond; e-post; tavapost; kohapeal
- iseteeninduskeskkond; e-post; tavapost; kohapeal; muu
- faili üleslaadimine
- iseteeninduskeskkond; e-post
- iseteeninduskeskkond; e-post; tavapost; kohapeal
- X-tee; faili üleslaadimine; iseteeninduskeskkond
- e-post; tavapost
- faili üleslaadimine; iseteeninduskeskkond; tavapost
- iseteeninduskeskkond; faili üleslaadimine
- X-tee
- X-tee; faili üleslaadimine; iseteeninduskeskkond; e-post; tava...
- X-tee; faili üleslaadimine; iseteeninduskeskkond; tavapost; m...

Resulting from the analysis

Conclusions in figures

There are 421 reports collected periodically by state agencies in Estonia

In addition, there are a number of one-off reports and a large number of European Union reports.

The most common reporting options are self-service environments (268) and e-mail (43)

Automated reporting channels are in the minority today.

More than half of the reports must be submitted once a year or once a month (257 reports)

The rest of the reporting period is quarterly or semi-annually.

Resulting from the analysis

Conclusions on development

Development of business systems

Businesses can implement data-driven reporting if appropriate software is used.

Development of state systems

A number of improvements need to be made to national state systems to make XBRL GL reporting available for entrepreneurs.

Supplementing legislation

Legislation and regulations must also be amended when amending and supplementing data sets.

How to develop further?

To automate reporting, the state needs to create data reception capacity for XBRL GL with X-road services in all state authorities.

How to develop further?

**From business perspective,
entrepreneurs are
recommended to use software
services that can simplify
reporting to the state.**

How to develop further?

The standardization of data must continue by the state authorities in public sector. There is a need to create a solution for managing and sharing machine readable standard data set descriptions.

There is no development without software development

All authorities must set up and implement similar web services for receiving and processing the data.

Feedback for entrepreneurs on the submitted data is also essential for the automatic submission of the data, not only for the manual entry into the self-service.

Cooperation in reporting to a new level

Different state authorities operate according to different agreements between state agencies. There is no broad agreement on the format in which data should be exchanged.

The principles of the real-time economy cannot work if the data flow chain sometimes becomes non-automatic.

The use of different data structures, solutions and standards does not allow data to be moved automatically.

In order to simplify and increase the efficiency of reporting, it would be necessary to create a working group that coordinates the improvement of data flow processes, as well as state software development, creation of web services and data standardization.

Perspective

Reporting 3.0 leap to the next stage of development

Reporting 3.0

Reporting is treated as data.

The development of software for web services has not been adequately funded.



Data driven reporting

Public authorities will have an effective software capability to process XBRL GL data and **reflect it back to the data provider.**

Data standardization continues.

Trends in packaging and fuel reporting

The future

The project carried out a standardization of packaging and fuel consumption reporting, as a result of which the following steps are planned:

- Statistics Estonia is preparing to accept and receive data in the form of XBRL GL for fuel reporting.
- The transition to XBRL GL and standardized data for packaging reporting involves several parties. Preparations are under way for the introduction of standardized data (common report data structure and classifications).

There is no report in perfect reporting

The process of information flow is changing - submission can become collection or monitoring.

A possible development option is that data will no longer be submitted but will be collected automatically during process monitoring.

The data is used as micro data by the collecting agency, which allows the data analytics to move to a new level of detail.

tieto *EVRY*

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