

# Appendix 1

## e-エストニアのサービス例

# ポータル利用例：引っ越し

EESTI.EE TOPICS 

CONTACTS MY EESTI.EE

Home / Life events

## I am changing my residence ☆

- I have to change my family physician
- How to find a suitable nursery school for my child?
- My child must change schools
- Am I obligated to notify the State about my change of residence?
- How can I register my new residence?
- Can family members or other people living at the same address submit a joint notice of residence?
- What data are provided on the notice of residence?
- Do I have to notify the local government if I leave my previous residence?
- What should I consider when submitting a notice of residence as a lessee?
- In which cases can the city or rural municipality government decline my residence registration?
- I have to change the address of my business in the register data
- Termination of the network contract and electricity contract and entering into a new contract

### I have to change my family physician

You can search for a family physician closer to your new residence on the homepage of the [health insurance fund](#) .

In order to be entered into the practice list of a family physician, you have to submit an application to your new family physician. A separate application shall be submitted for each family member. If there are no available places in the practice list of the family physician, they will reply to you within 7 days.

More information on registration on the list of a family physician or for exchanging the family physician can be found on the [homepage of the health insurance fund](#) .

The transfer to the list of a new family physician will take effect on the first day of the next calendar month.

[References](#) 

### How to find a suitable nursery school for my child?

You can choose a nursery school for your child from [municipal nursery schools](#) or private nursery schools if there are available places in your chosen nursery school.

If a child's registered residence is in the corresponding city or rural municipality, they are entitled to a place in a municipal nursery school.

When searching for a nursery school for your child, it would be wise to contact the education official of your local government who can explain to you the conditions for accepting a child into a nursery school and procedure for applying for a nursery school place.

[Services](#) 

# オンライン行政手続き例：社会保障受給（養育手当）

 Taotlus on täitmisel. Samm 1/2.

## Minu andmed

Nimi: [redacted]  
Isikukood: [redacted]  
Riik: Eesti  
Maakond: Rapla maakond  
Linn/Vald: Rapla vald  
Asula: Juula küla  
Tänav, maja, korter: [redacted]  
Postiindeks: [redacted]  
Telefoninumber: [redacted]   
E-posti aadress: [redacted]   
Otsust soovin: e-posti teel  
Kontonumber (IBAN): [redacted] 

## Minu lapsed ja toetuste taotlemine

Saate kõiki toetusi ja hüvitisi taotleda ühekorraga, kuid sellisel juhul kehtivad kõikidele toetustele ühesugused andmed (näiteks sama kontaktaadress, pangakonto ning otsusest teavitamise viis jms).

Lapse andmed	Toetused, mida soovin lapsele taotleda
<p>MARII REBEL</p> <p>Isikukood: [redacted]</p> <p>Seos lapsega: [redacted]</p> <p>Elukoht: [redacted]</p> <p><a href="#">Täiendan ja muudan andmeid</a></p>	<p><input type="checkbox"/> Üksikvanema lapse toetus</p> <p><input type="checkbox"/> Ajateenija või asendusteenistuja lapse toetus</p>

(出所) eGA講義資料 Annela Kiirats "Secure ID for Digital Government Architecture"

# e-Health ポータル

## My e-Health

VANANENUD TARKVARA  
KASUTAMINE ON OHTLIK →

My data

■■■■■  
■■■■■  
**INSURED**  
Family doctor:  
■■■■■

### Health data

[Time critical data](#)

[Dental care documents](#)

[Dental care charts](#)

[Dental status chart](#)

[Passport of Immunization](#)

[Ambulance charts](#)

[Prescriptions](#)

[Referrals](#)

[Invalid referrals](#)

[Valid referrals](#)

[Referrals related to an appointment](#)

[Health declarations](#)

[Health certificates](#)

[Case summaries](#)

[Out-patient case summaries](#)

[Day-care case summaries](#)

[In-patient case summaries](#)

[Birth case summaries](#)

[Notifications](#)

[Development assessment notifications](#)

[Immunisation notifications](#)

[Growth notifications](#)

[Examination notifications](#)

[Counselling notifications](#)

[Examination results](#)

[Image references](#)

[Referral responses](#)

### Important updates

Data is added to Your health declarations and health certificates (sleep apnoea). Possibility to open attachments (pdf) in case summaries is developed.

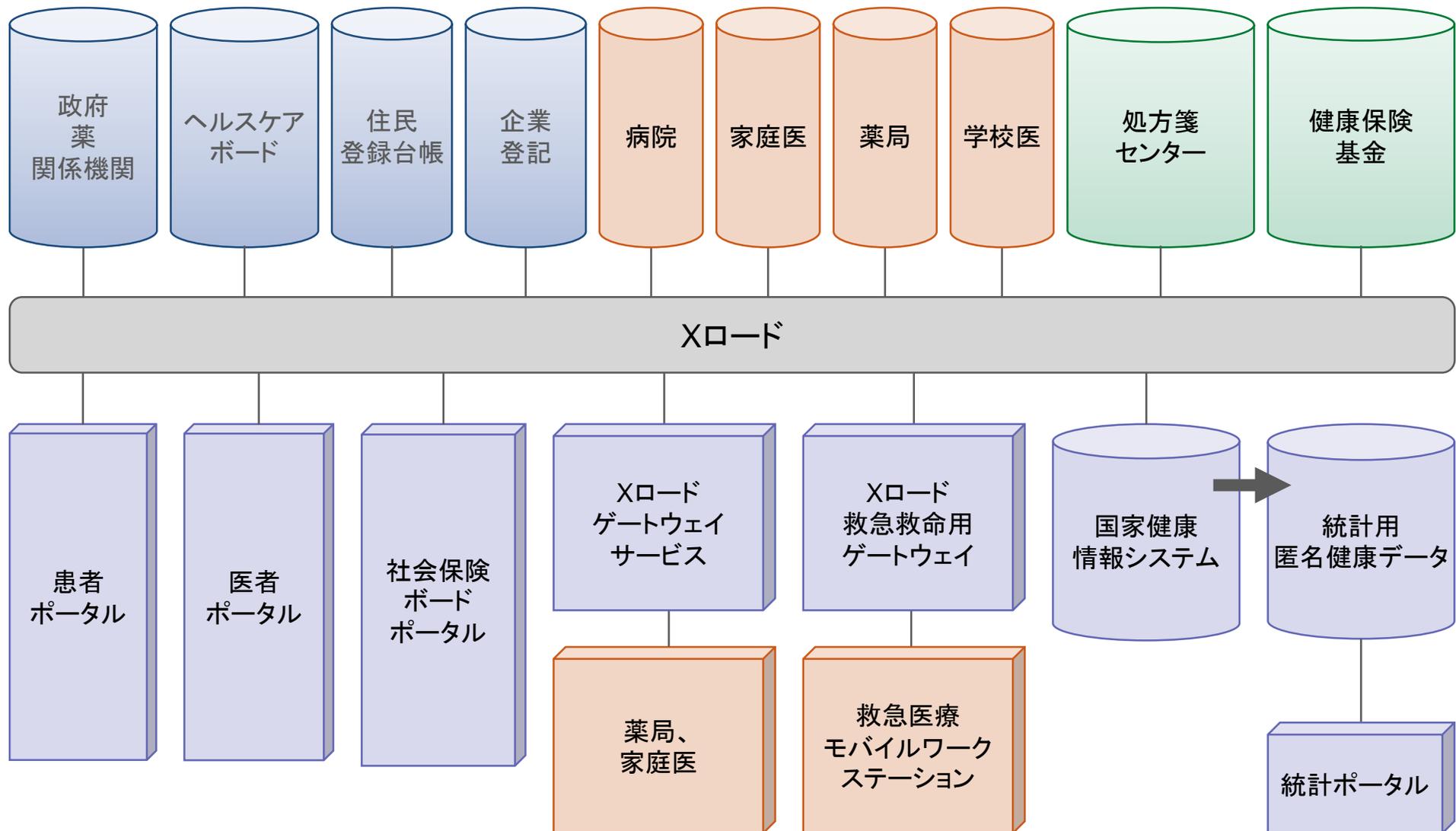
### Invoices submitted to the Estonian Health Insurance Fund

Click on the box to view medical invoices, click on the information sign for more information

#### 【ポータル上のサービス抜粋】

- 医療データの閲覧
  - 予防接種
  - 歯科
  - 健康診断(画像含む)
  - 治療歴 など
- 処方箋
- 医師の紹介状
- 通知
  - 予防接種
  - 定期健診 など

# e-Health



(出所) 当社作成

# e-Health: 電子処方箋

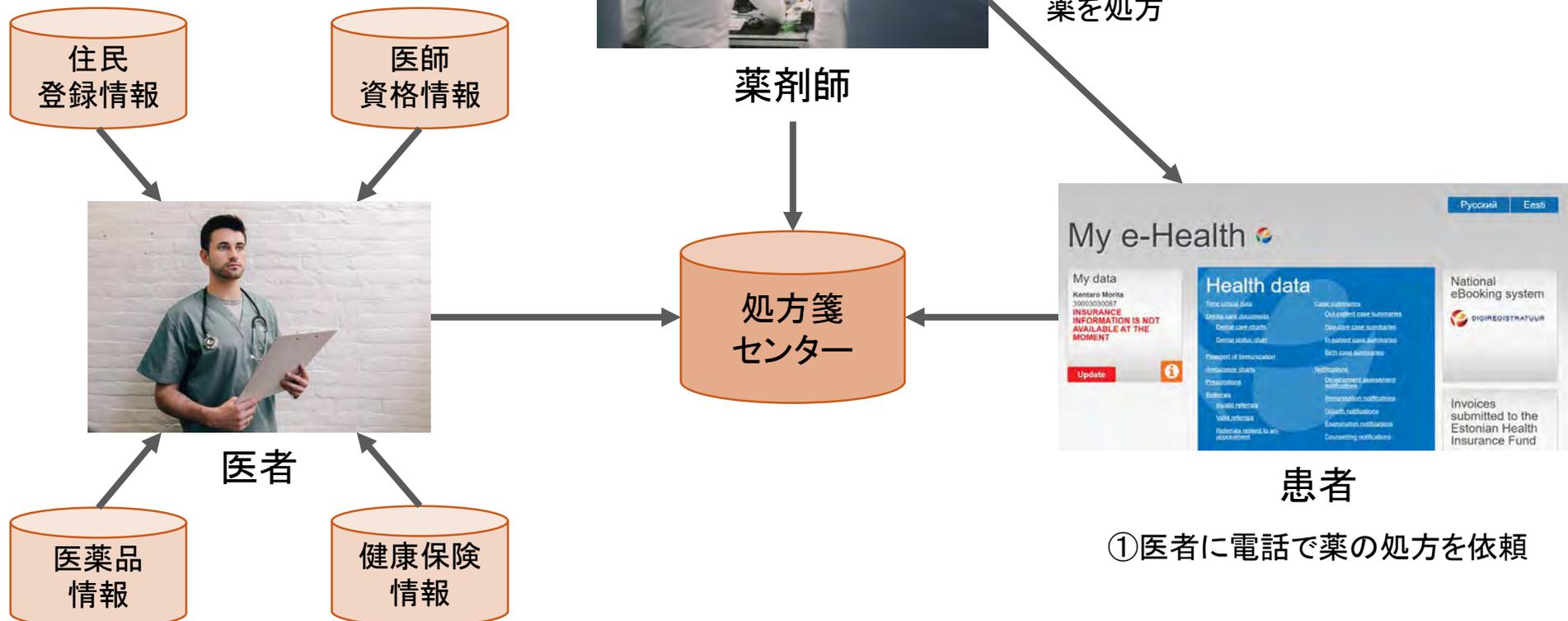
② 医師は医師ポータルから薬の処方箋を登録する。その際に患者及び医師の資格等が自動で確認される



薬剤師

③ 患者は任意の薬局を訪問

④ 薬剤師は患者のIDカードを受け取り、処方箋センターに薬の情報を照会し薬を処方



# e-Health

- **各機関の収集した医療データはX-Roadにより相互交換が可能**
  - Health Information System (EHIS)で全データ管理
  - 医者・医療機関は患者のデータにアクセスできる
  - 医療機関が医療データおよび治療のサマリーをオンラインのデータベースに登録する義務がある
- **専用ポータル**
  - さまざまなサービス: 個人の健康医療データ(画像含む)や診断結果などの閲覧、健康診断の通知、オンライン処方箋
  - 開示したくないデータの選択が可能 (例)ゲノム情報など
  - 18歳以下の子供については、親が管理
- **国境を越えて、フィンランドと医療データの連携を開始している**

# e-Healthの発展4段階



- 医療データが(紙ではなく)電子的に保存
- 医療機関間のデータ交換・共有はなく、各医療機関が各自のデータベースに保存
- 医療データが共通のプラットフォームで管理され、データ共有
- “個人”が単位となり、医療機関・デバイスから集めた健康データを、個人アカウントで管理。個人のデータ所有権が明確化
- それぞれの個人医療データに基づいた、個人サービスが提供される
- AI解析による医療サービス・コンサルの市場が確立される。より多くの個人の個人医療データが集まることにより、その質は向上する

(出所) eGA講義資料 Madis Tiik “e-Health in Estonia – Secure data exchange since 2009”を基にMURC作成

# e-Tax

- エストニアの税申告のうち98%はオンラインで行われている
- X-Roadにより、個人情報や給与データなどを何度も入力する必要なし
- 3~5分程度で完了

## e-Tax ポータル画面

Tulud	収入	Mahaarvamised	控除
▶ 5.1 Palk ja muud tasud	<input type="text"/>	▶ 9.2 Eluasemelaenu intressid	<input type="text"/>
▶ 5.2 Vabatahtlik kogumispension	0.00	▶ 9.3 Koolituskulud	<input type="text"/>
▶ 5.3 Investeeringuriskiga elukindlustuslepingud	0.00	▶ 9.4 Kingitused ja annetused	0.00
▶ 6.1 Väärtpaperite vöörandamine	0.00	▶ 9.5 Vabatahtliku kogumispensioni maksed	0.00
▶ 6.2 Kasvava metsa raieõiguse ja raiutud metsamaterjali vöörandamine	0.00	▶ 9.6 Töötuskindlustuse ja kohustusliku kogumispensioni maksed	<input type="text"/>
▶ 6.3 Muu vara vöörandamine	0.00	▶ 9.7 Välisriigis tasutud sotsiaalkindlustuse maksud ja maksed	0.00
▶ 6.4 Osaluse vähendamine, likvideerimisjaotised	0.00	Täiendav laste maksuvaba tulu *	0.00
▶ 6.5 Tulu finantsvaralt	0.00	Maksuvaba tulu *	
▶ 7.1 Muud tulud, millelt ei ole tulumaksu kinni peetud	0.00		
▶ 7.2 Tulu isikute ühenduses või varakoogumis	0.00		
▶ 7.3 Üüri- või renditasu	0.00		
▶ 9.1 Lapse maksustatav tulu	0.00		
▶ Välismaalt saadud tulu	0.00		
	Kokku: <input type="text"/>		Kokku: <input type="text"/>

(出所) eGA講義資料 Annela Kiirats "Secure ID for Digital Government Architecture"

- 生徒、親、教員、教育機関の透明なコミュニケーションのためのオンラインプラットフォーム
- 導入は学校の任意だが、多くの学校で利用されており、自治体が補助する場合も多い

## ■ 親:

- 子供の学業スケジュール、進捗、成績などを確認
- 担当教師との連絡(当日の欠席など)

## ■ 生徒:

- 課題の確認、グループワーク、成績・進捗の確認、連絡事項の確認など

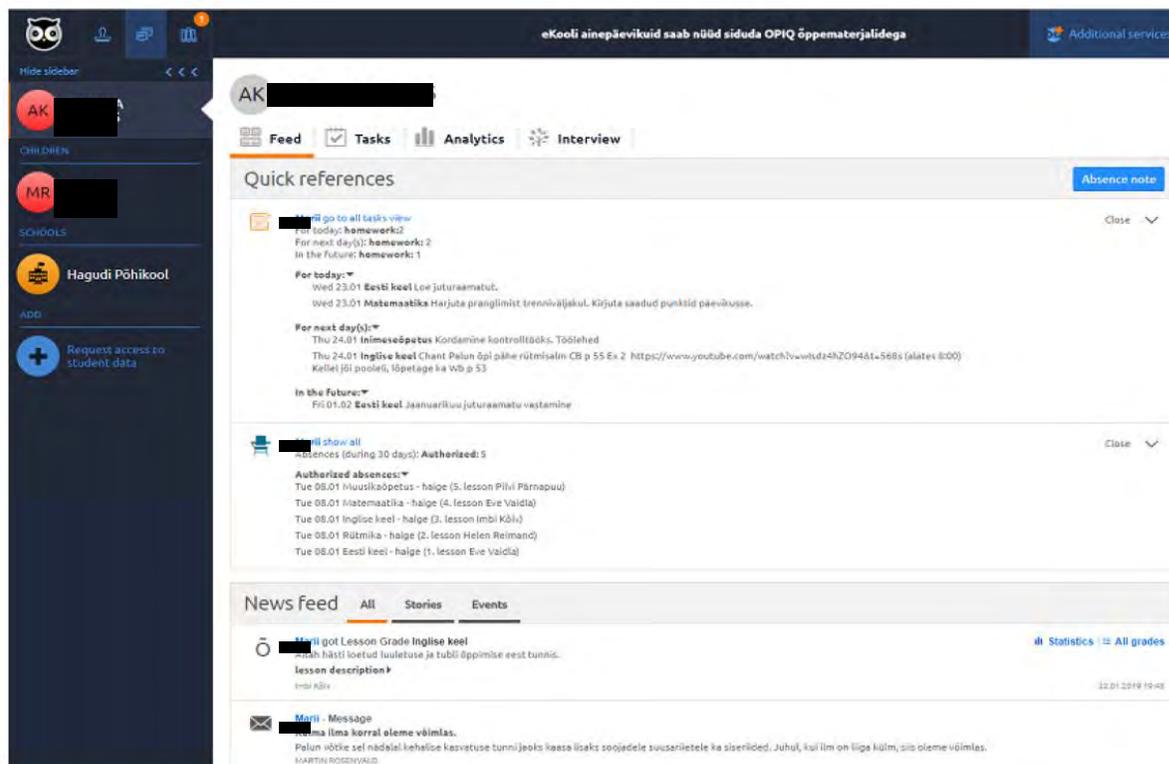
## ■ 教員:

- 成績管理、課題提出管理
- 親との連絡

## ■ 自治体:

- 統計分析、報告書作成

## 親のポータルサイト



# e-Residency

## ■ エストニアの電子住人 (e-Resident) になることができる

- 2014年～
- オンラインで申請可能
  - パスポートや動機書、クレジットカードが必要
  - 費用100ユーロ
  - 承認までに6～8週間
- 大使館などで受け取り

## ■ エストニアのe-Residentとしてできること

- e-Resident用デジタルIDカードにより電子本人認証と電子署名が可能
- エストニアにおける会社の設立とEU市場へのアクセス
- 一部のe-Servicesの利用

## ■ しかし、国籍・市民権、(税務上の) 居住権やエストニアへの自由な入国ができるわけではない



## E-RESIDENCY GOALS IN NUMBERS



### Goal in 2014:

- ❖ 1,000,000 e-residents by year 2025

### Goal for 2018:

- ❖ 2500 new companies established

### Future goal:

- ❖ Quality of established companies



# デジタルシチズン起業家の誘致 (E-Residency) + スタートアップエコシステム強化

STARTUP ESTONIA

Supercharging the Estonian startup ecosystem

Estonian Startup Visa is welcoming non-EU startup founders to apply and relocate to our lively startup community! Learn more [over here](#)

**From Inception to Disruption**

Startup Estonia is a governmental initiative aimed to supercharge the local startup ecosystem in order to see many more startup success stories to come from Estonia. For that, we are working on making Estonia one of the world's best places for startups by focusing on these 4 building blocks:

- Strong Ecosystem**: Uniting, building and representing the local startup community.
- Smart People**: Organizing trainings for startup teams and co-organizing impactful startup events with the community.
- Smart Money**
- Friendly Regulations**

<https://www.startupestonia.ee/>

Tehnopol

Startup Incubator

Tehnopol Startup Incubator helps your startup to get going with an efficient training and a convenient co-working hub.

We invest up to 10000€ worth of expertise to your world-changing team in a year. Investment or reach export markets. Our main focus areas are ICT, green and

2,500 visitors | 200+ investors | 700+ people from 130+ startups | 2,000+ matchmaking meetings

<https://www.tehnopol.ee/en/startup-incubator/>

Latitude59 is the flagship startup and tech event of the world's first digital society.

2,500 visitors | 200+ investors | 700+ people from 130+ startups | 2,000+ matchmaking meetings

<https://latitude59.ee/>

TAL TECH Mektory

Start-up programs

MEKTORY

Preincubation Program "STARTERTallinn"

Start-up pre-incubation program starts on the 20th of September, 2019 with a launch event; Target group: all students from Universities, Applied Science

<https://www.ttu.ee/projects/mektory-eng/mektory-center/>

lift99

An ecosystem of influential & passionate founders

We're building the founder ecosystem across CEE & the world.

<https://www.lift99.co/>

TELLISKIVI CREATIVE CITY

Creative pulse. Industrial bones.

<https://telliskivi.cc/en/>

# e-Business Register

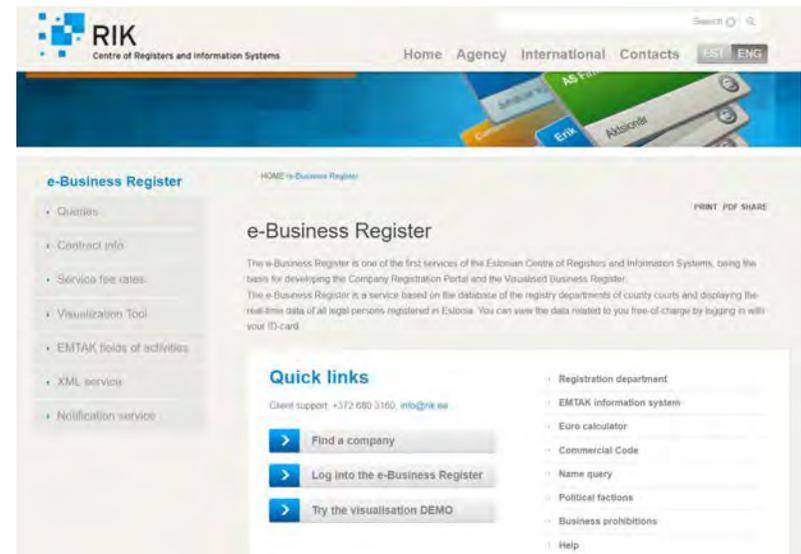
## ■ デジタル法人登記

## ■ オンライン企業登録

- 会社の立ち上げ(外国からも)
- 企業データの登録や年次報告書の提出義務
- データは年次報告書に基づいて、自動更新

## ■ 情報公開

- 多くの企業情報は、一般公開
- 一部の情報は有料提供
- IDカード、モバイルID、またはe-Residencyカードを使ってログイン



# 学校教育 (e-Education) ~ 親・学校間のコミュニケーションは電子化されている

## Parent view

The screenshot displays the 'Parent view' interface for a user named ANNELA KIIRATS. The interface is divided into several sections:

- Header:** A dark blue bar at the top contains navigation icons, a notification badge, and a message: "Use of the school cards of Tallinn students can be monitored in the eKool environment." There is also a link for "Additional services".
- Left Sidebar:** A dark blue sidebar on the left shows the user's profile (AK ANNELA KIIRATS), a list of children (CHILDREN) including Marii (MR), and a list of schools (SCHOOLS) including Põhikool.
- User Profile:** The main content area shows the user's name "AK ANNELA KIIRATS" and navigation tabs for "Feed", "Tasks", and "Interview".
- Quick references:** A section titled "Quick references" contains two items:
  - Marii go to all tasks view:** A card with a blue header, a close button, and details about homework for today and the next day. It lists specific assignments like "Eesti keel" and "Matemaatika".
  - Marii show all:** A card with a blue header, an open button, and information about absences: "Absences (during 30 days): Authorized: 3".
- News feed:** A section titled "News feed" with tabs for "All", "Stories", and "Events". It contains two news items:
  - Marii - Handled: Absence note (17.03.2017):** A news item with a blue header, a chair icon, and text explaining an absence: "Marii puudus hommikul tundidest kodustel põhjustel." It is dated 17.03.2017 12:08.
  - Marii - 17.03.2017, - 17.03.2017, (Kodune põhjus) - Ferns-master absence reason (Eva Väidla):** Another news item with a blue header, a chair icon, and text explaining an absence: "Marii puudus hommikul tundidest kodustel põhjustel." It is dated 17.03.2017 12:08.

# e-Democracy

## ■ エストニアの政治システム

- 議会制民主主義
- 議会 (Riigikogu) : 101人の国会議員、比例代表制

## ■ デジタルツールによる政府と市民の民主的対話の促進



## People's Assembly (政策クラウドソーシング)

The screenshot shows the RAHVAKOGU website interface. At the top, there are navigation tabs for 'Ettepanekute kogumine' (January 2013), 'Analüüs' (February 2013), 'Arutelupäev' (April 2013), and 'Seadusemuudatused' (April 2013). A search bar and language options (RU, EN) are also present. The main header features the 'RAHVAKOGU' logo and a menu with categories: RAHASTAMINE, ERAKONNAD, VALIMISED, KAASATUS, SUNDPOLITISEERIMINE, and VARIA. A red 'Sisene' button is located on the right.

The main content area is a blue box titled 'Analüüsiartiklid:' containing a list of links:

- [Valimised: kandidaadid](#)
- [Valimised: riigikogu liikmete arv](#)
- [Valimised: ringkonnad](#)
- [Valimised: hääletamise korraldus](#)
- [Valimised: valija](#)
- [Valimised - teised valimised](#)
- [Valimised: Võitja selgitamise reeglid](#)
- [Kokkuvõte: Valimised](#)

Below the blue box, a dark grey bar contains the text: 'Teemas "Valimised" on 627 ettepanekut. **Esita ka!** Järjesta aja / **toetuse** / vastuhäälte / arutelude / juhuslik põhjal.'

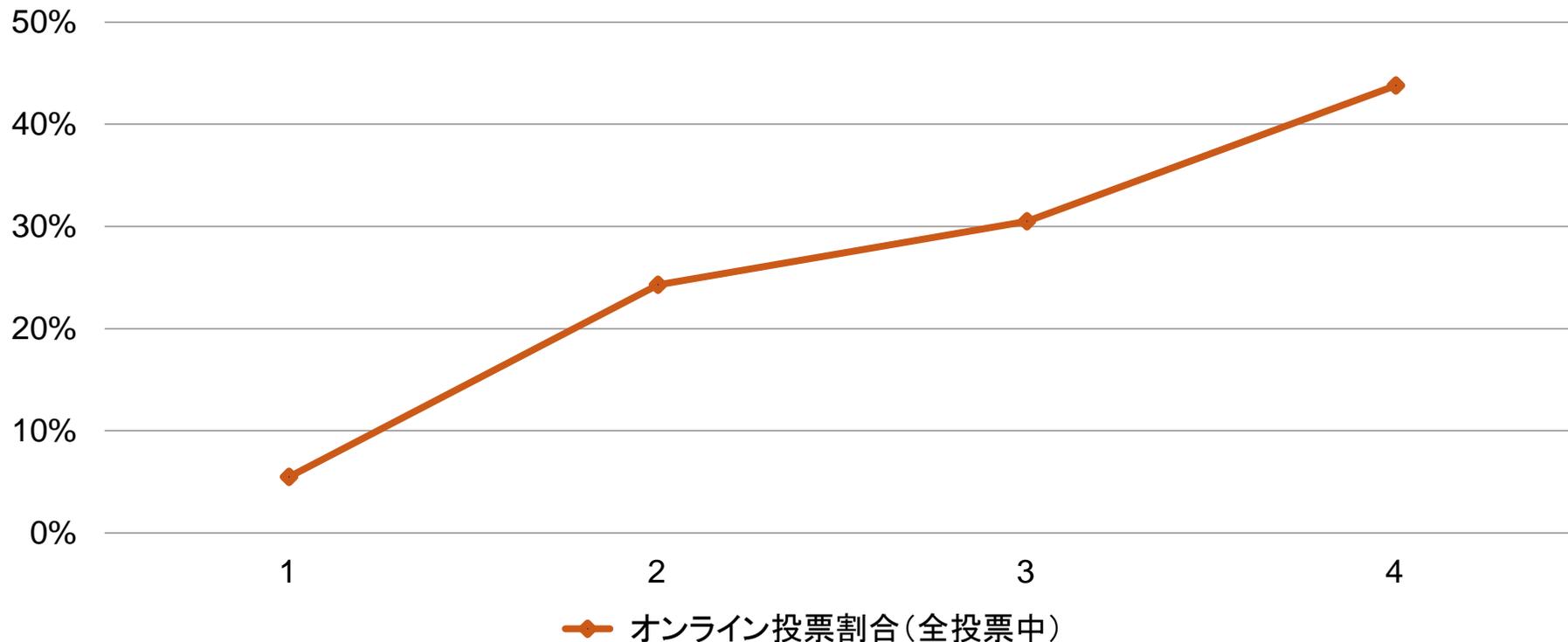
A comment by Toivo Karmo, posted 2 months ago, reads: 'Riigikogu liige ei tohi KOV valimistel kandideerida. (3)'. It has 337 likes and 9 dislikes. The comment text is: 'Kui ta seda siiski soovib, peab ta kõigepealt riigikogu mandaadist loobuma.'

(出所) [https://www.citizens.is/portfolio\\_page/rahvakogu/](https://www.citizens.is/portfolio_page/rahvakogu/)

# i-Voting

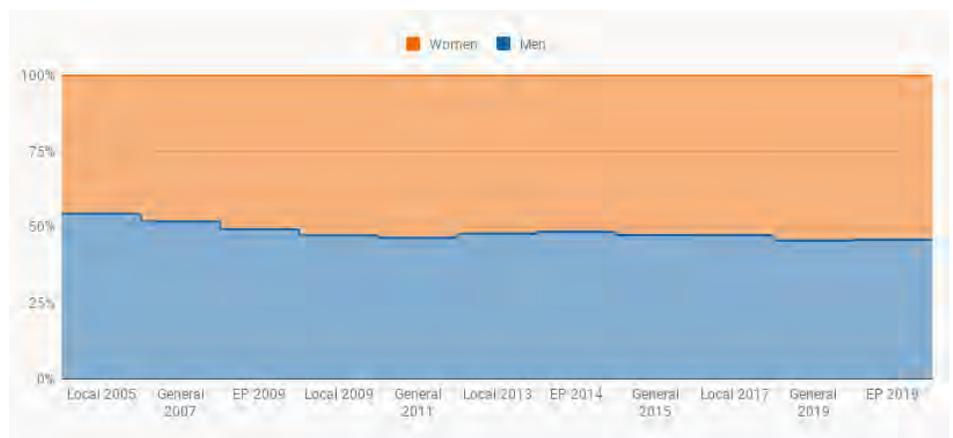
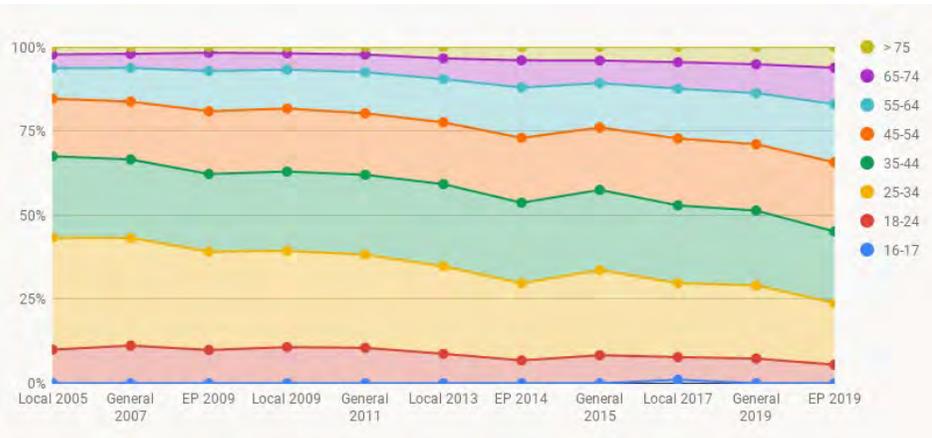
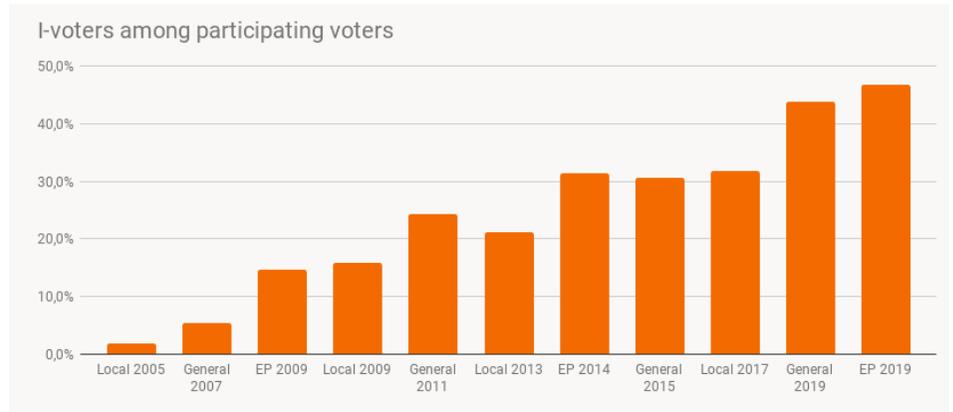
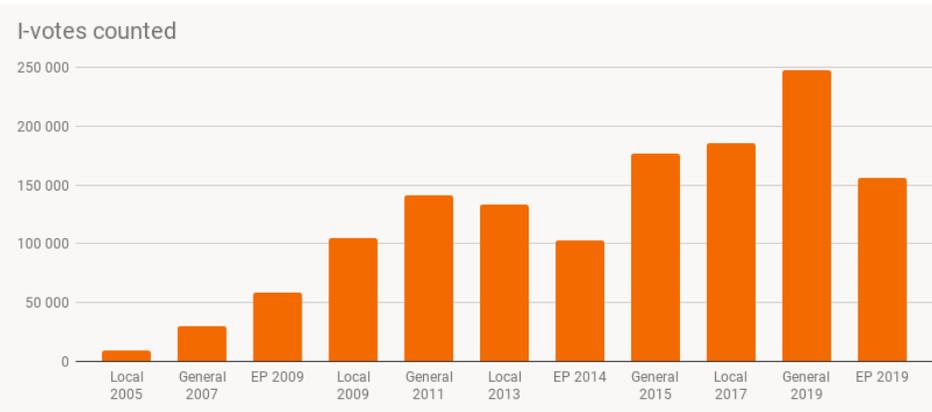
- エストニアは電子投票を国政選挙に取り入れた世界最初の国
- 電子投票の割合は増加中

## 議会選挙の投票状況



(出所) Valimised "Statistics about internet voting in Estonia"

# 直近の国政選挙では、投票数の44%が電子投票で投じられた



(出所) <https://www.valimised.ee/en/archive/statistics-about-internet-voting-estonia>

# e-Cabinet

## ■ 行政の意思決定効率化

- 閣議に関するリアルタイムの情報更新と、議題の事前共有
- 事前に議題への立場(賛否)表明とコメントが可能
  - 反対意見のない議題は、自動承認

## ■ 効果

- 会議時間は大幅短縮(4~5時間→0.5~1.5時間)
- 印刷コストの削減
- 遠隔会議が可能に



(出所) eGA講義資料 Aivar Rahno "Estonian Government - Decision-making procedures, Information Systems"

## 政治的意思決定の流れ イメージ



# e-Police

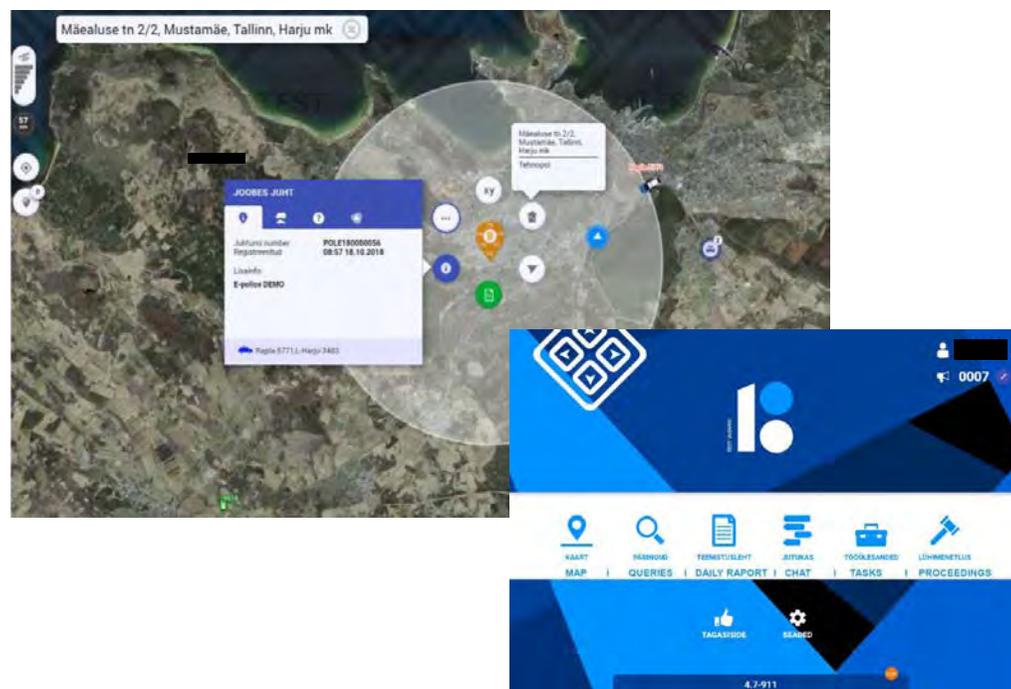
## ■ 警察におけるデジタルツール

- 司法データベースから、不審者の犯罪関連情報を即時に確認
- タブレット上で市内の事件・事故やその対処状況のリアルタイムマップを利用

### 警察の使っている端末



### 利用画面



(出所) eGA講義資料 IT and Development Centre Estonia Ministry of the Interior “E-Police (Apollo)”