COLLOQUIUM | 08 Juni 2017 | Leuven

Het digit

impact op o

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"Estonia: European champion of digitalization of the public services – impact on   management and work conditions of the civil servants?"

Gerli Jõgi - Head of HR Estonian Tax and Customs Board

Mel ue steun va

HR Public | Sharing Knowledge and Experience

REPUBLIC OF ESTONIA
TAX AND CUSTOMS BOARD

DIGITALISATION AND IMPACT ON HRM
AT
ESTONIAN TAX AND CUSTOMS BOARD

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ESTONIA IN NUMBERS

- **People: 1,3 mln**

- **GDP (2016): 20,9bn €**

- **In 2005 Estonia became the first nation to hold elections over the [Internet](),**

- **In 2014 Estonia became the first nation to provide [E-residency]()**

- **3 hours to start a company online**

- **most start-ups per capita**

- **1st in tax competitiveness**

- **lowest government debt**

ESTONIAN TAX AND CUSTOMS BOARD

- **Goal: We are supporting activities and development of businesses**

- **Customers: both natural and legal persons: including 166 000 companies and 35 000 self-employed**

- **First public body that started offering electronic services to its clients (in 2000)**

- **Employees: 1400 throughout the country**

16 service offices
10 customs border crossing points

Muuga
Tallinn
Sillamäe
Paldiski
Narva
Rakvere
Jõhvi
Kärdla
Rapla
Haapsalu
Paide
Jõgeva
Kuressaare
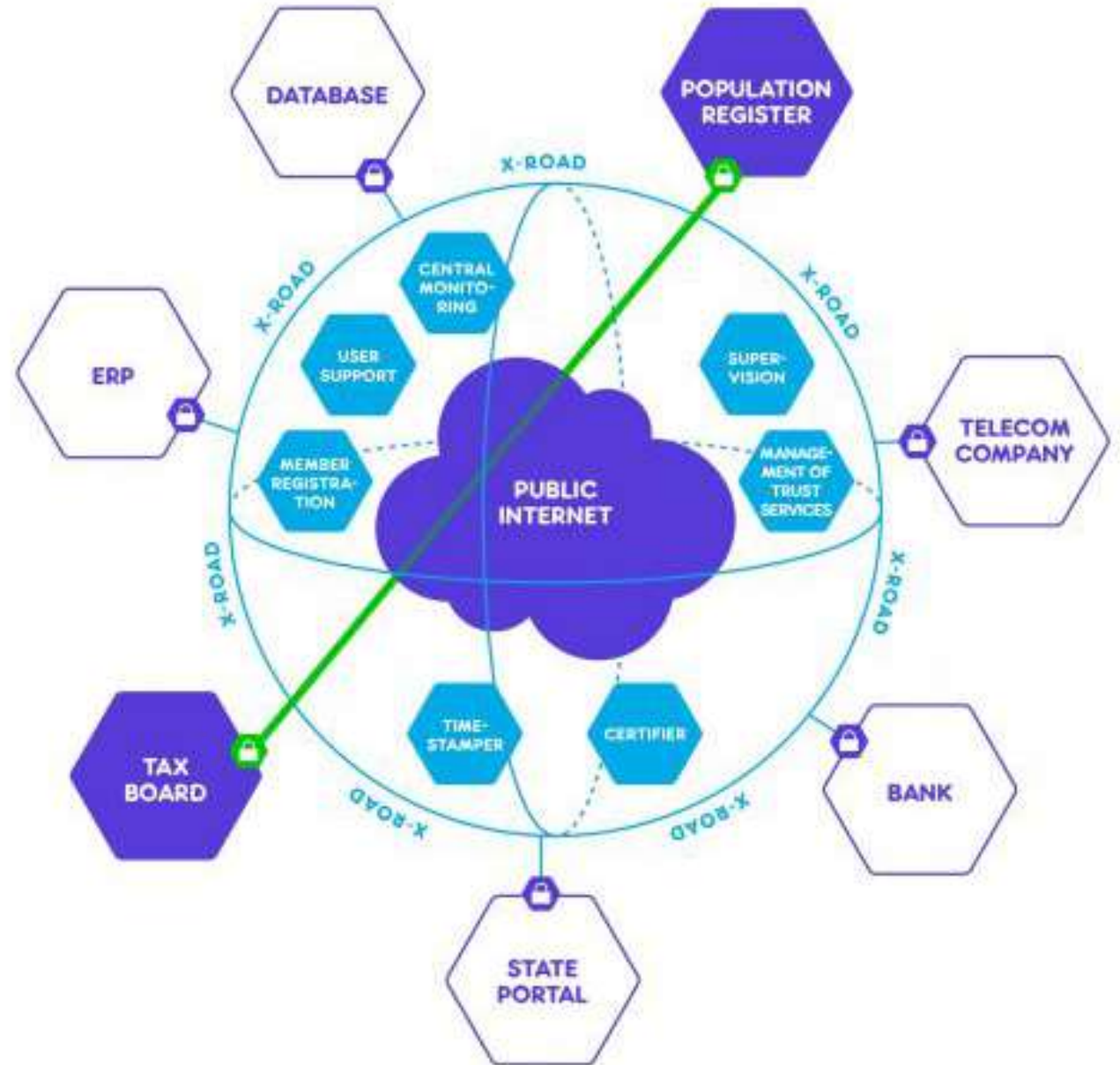Pärnu
Tartu
Viljandi
Pölva
Koidula
Valga
Võru
Luhamaa

DIGITAL ECOSYSTEM OF ESTONIA

REPUBLIC OF ESTONIA
Tax and Customs Board

X-ROAD and ID-CARD

ID CARD

✓ **ID card has 3 main functions :**

1) visual identification

2) authentication when using online services

3) digital signature

✓ **The card contains a chip holding a personal data file and two certificates: one for authentication purposes, and one for qualified digital signatures**

✓ **ID-card certificates are linked to various registries, databases and systems through the Personal Identification Code**
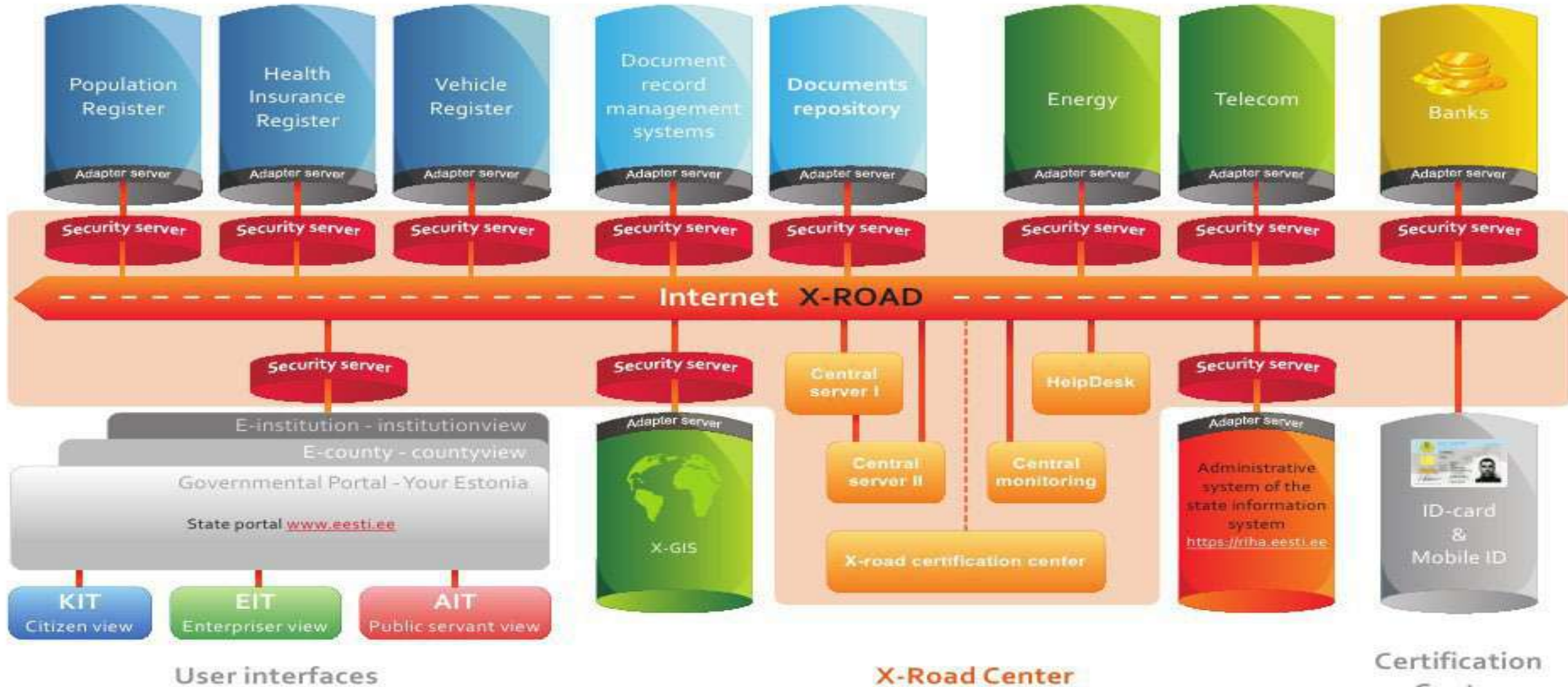
Estonian Information System's Authority

Estonian information system

Public sector · Private sector

Population Register — Adapter server
Health Insurance Register — Adapter server
Vehicle Register — Adapter server
Document record management systems — Adapter server
Documents repository — Adapter server
Energy — Adapter server
Telecom — Adapter server
Banks — Adapter server

Security server (×8)

Internet X-ROAD

Security server

E-institution – institutionview
E-county – countyview
Governmental Portal – Your Estonia
State portal www.eesti.ee

KIT Citizen view
EIT Enterpriser view
AIT Public servant view

User interfaces

Security server
Adapter Server
X-GIS

Central server I
Central server II
HelpDesk
Central monitoring
X-road certification center

X-Road Center

Security server
Adapter server
Administrative system of the state information system
https://riha.eesti.ee

ID-card & Mobile ID

Certification Center

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E-SERVICES (over 2000) eesti.ee

- ✓ **Filing tax returns**
- ✓ **E-prescriptions**
- ✓ **Submitting a notice of residence**
- ✓ **Land registry**
- ✓ **Registry of buildings**
- ✓ **E-school**
- ✓ **National examination data**
- ✓ **Applying for benefits, rehabilitation, special care, pensions (choosing a pension fund), etc**
- ✓ **Applying for all kinds of permits (construction)**
- ✓ **Query for own data**

- ✓ **Establishing a company**
- ✓ **All business registries and permits (selling excise good, transportation, construction services, fire safety etc)**
- ✓ **Managing employees' registration (ETCB and Health Fund)**
- ✓ **Company annual reports and statistical information**
- ✓ **E-health: (x-rays, family physicians, occupational health physicians)**
- ✓ **Using x road to offer your services (banking, e-health, using the ID card as a loyalty card**

DIGITALISATION AND HR
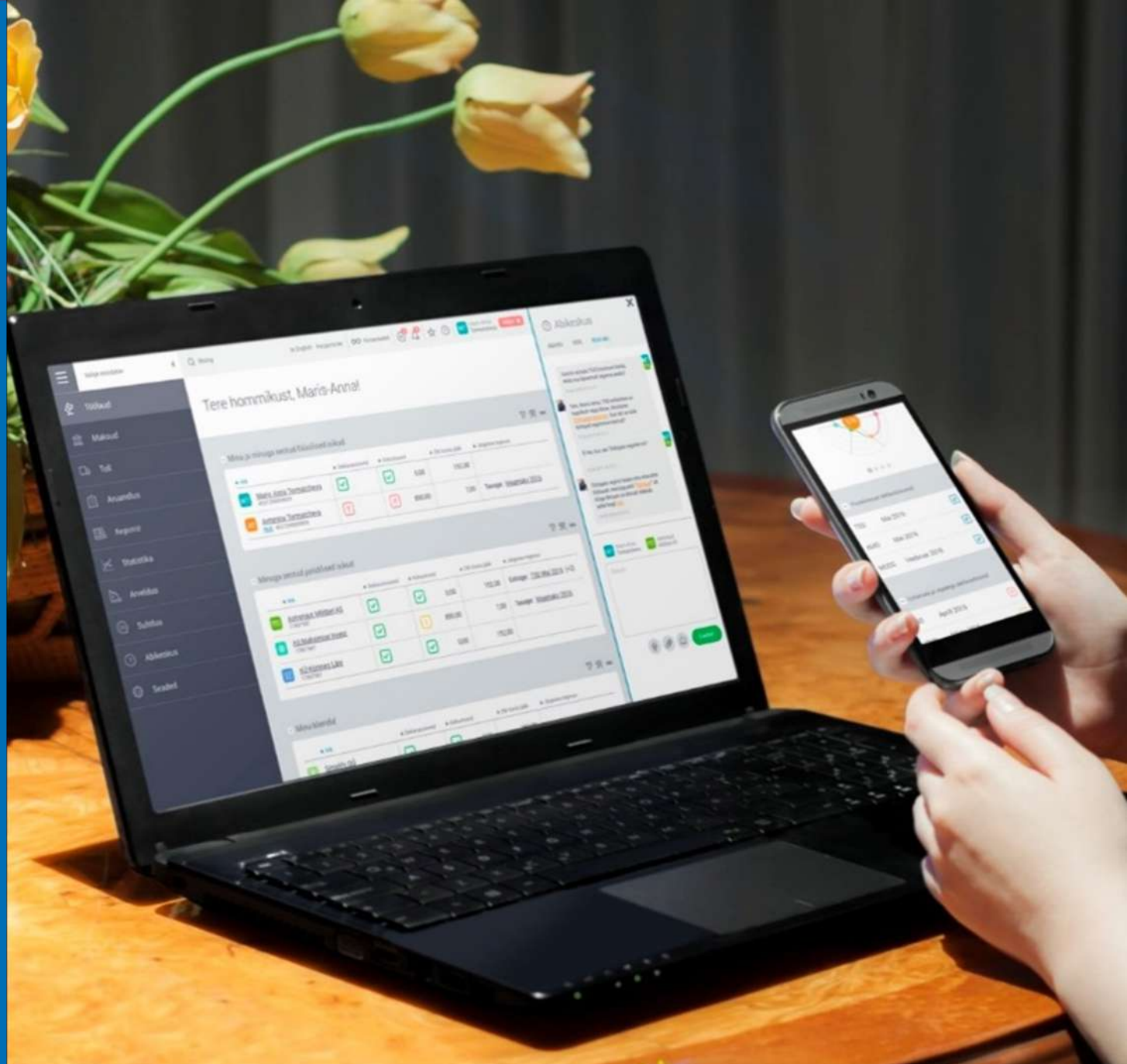
E-tax and e-customs: online tax and customs services

✓ **Established in 2000, renewing is constant, completely new system in development.**

✓ **Different tax and customs services are available in one system**

✓ **Offers 24 hours a day services for natural and legal persons**

✓ **Enables secure data exchange**

✓ **High-speed, simple, convenient, paper-free**

Amount of electronically filed tax returns	
VAT Returns	99,3%
Natural Person Income Tax Returns	95,4%
Customs Declarations	99,8%
Corporate Income Tax and Employer Tax Returns	99,0%

Number of customer contacts in service offices across Estonia

Cost of collection ratio

2004	2013
1%	0,4%

Office and service office space

2011	2013
30 000m2	21 000m2

HR statistics

MTA	01.2003	01.2011	01.2012	01.2013	01.2014	01.2015	02.2016	03.2017
Number of employees	2450	1801	1741	1554	1548	1543	1425	1385

Case 1: E-SCHEDULING OF TAX DEBT

E-scheduling of tax debt

- ✓ **Low-risk companies can plan the payment schedule of their tax debts in the e- tax system by themselves.**

IMPACT:

- ✓ **The service has increased the number of companies who want to schedule their tax debt over 2 times. However, we see it as positive:**

  - ✓ **They have a possibility to manage their cash flow.**

  - ✓ **They are actively managing their debt.**

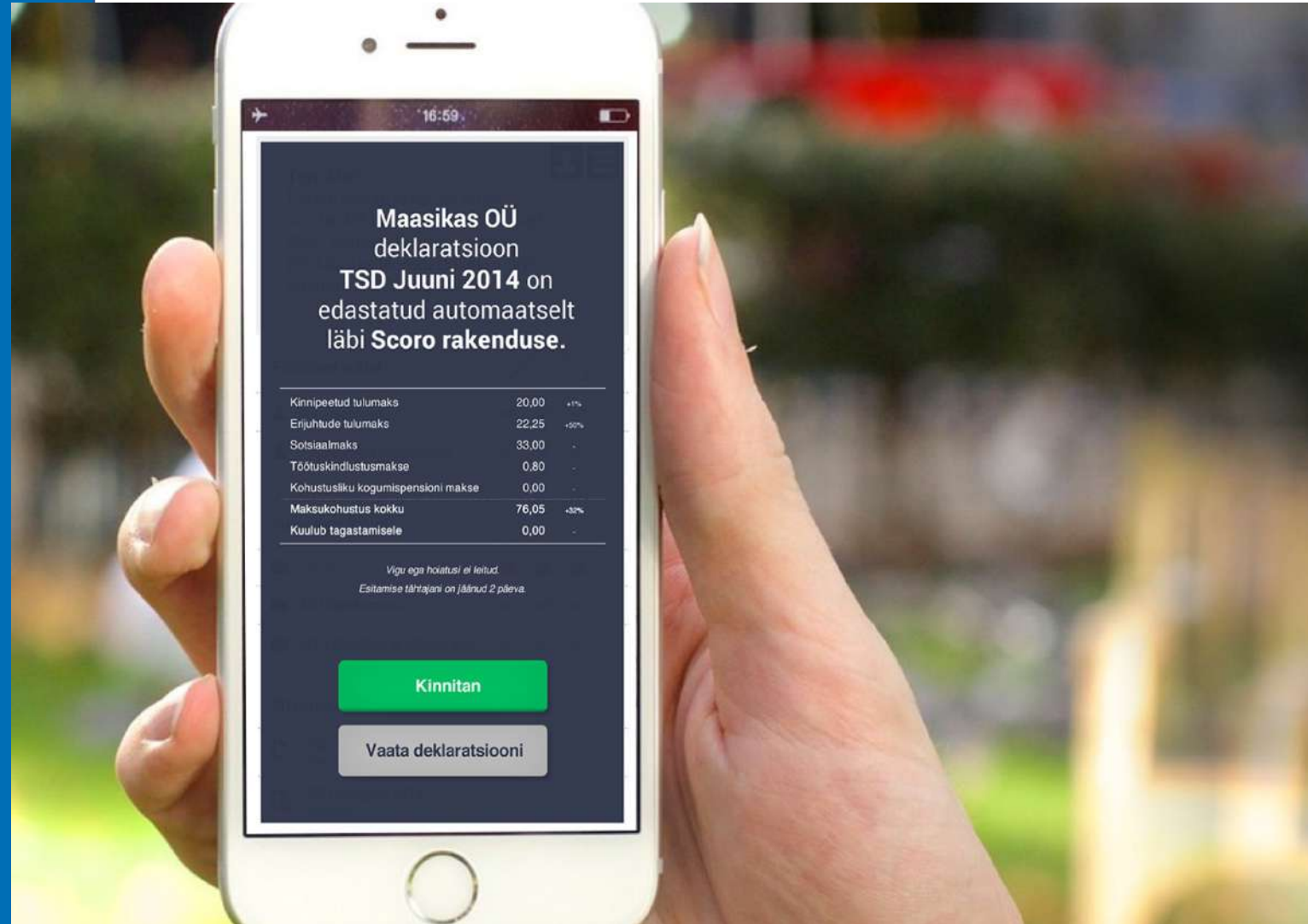 - ✓ **If they had paid all of their debt, the state would not have received interest.**
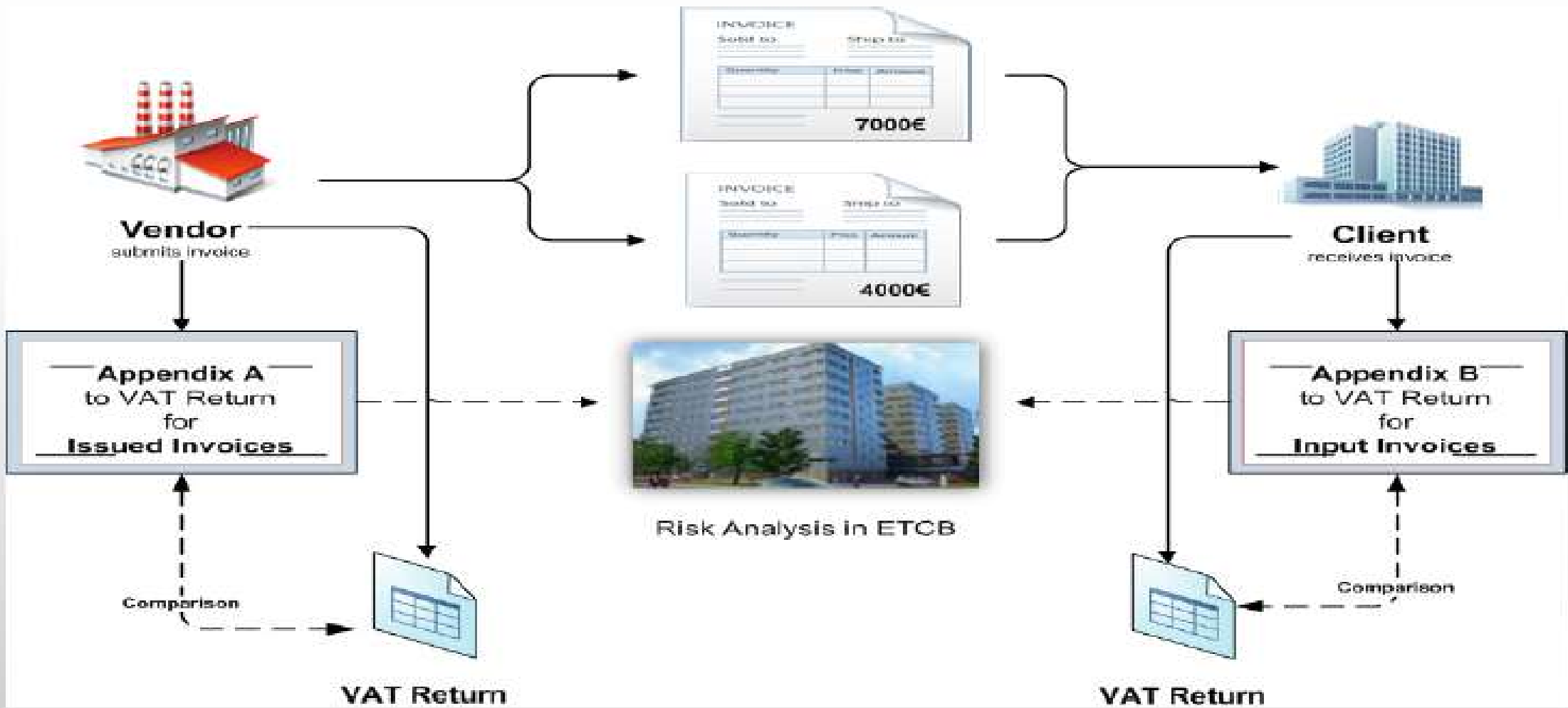
E-scheduling of tax debt. Impact for ETCB

- ✓ **If they don't schedule the debt themselves, we have to schedule it for them or start the debt recovery process.**

- ✓ **Less employees are needed for more simple jobs: debt scheduling and simple activities for debt recovery.**

- ✓ **More resources are channelled to bigger and complex debt cases.**

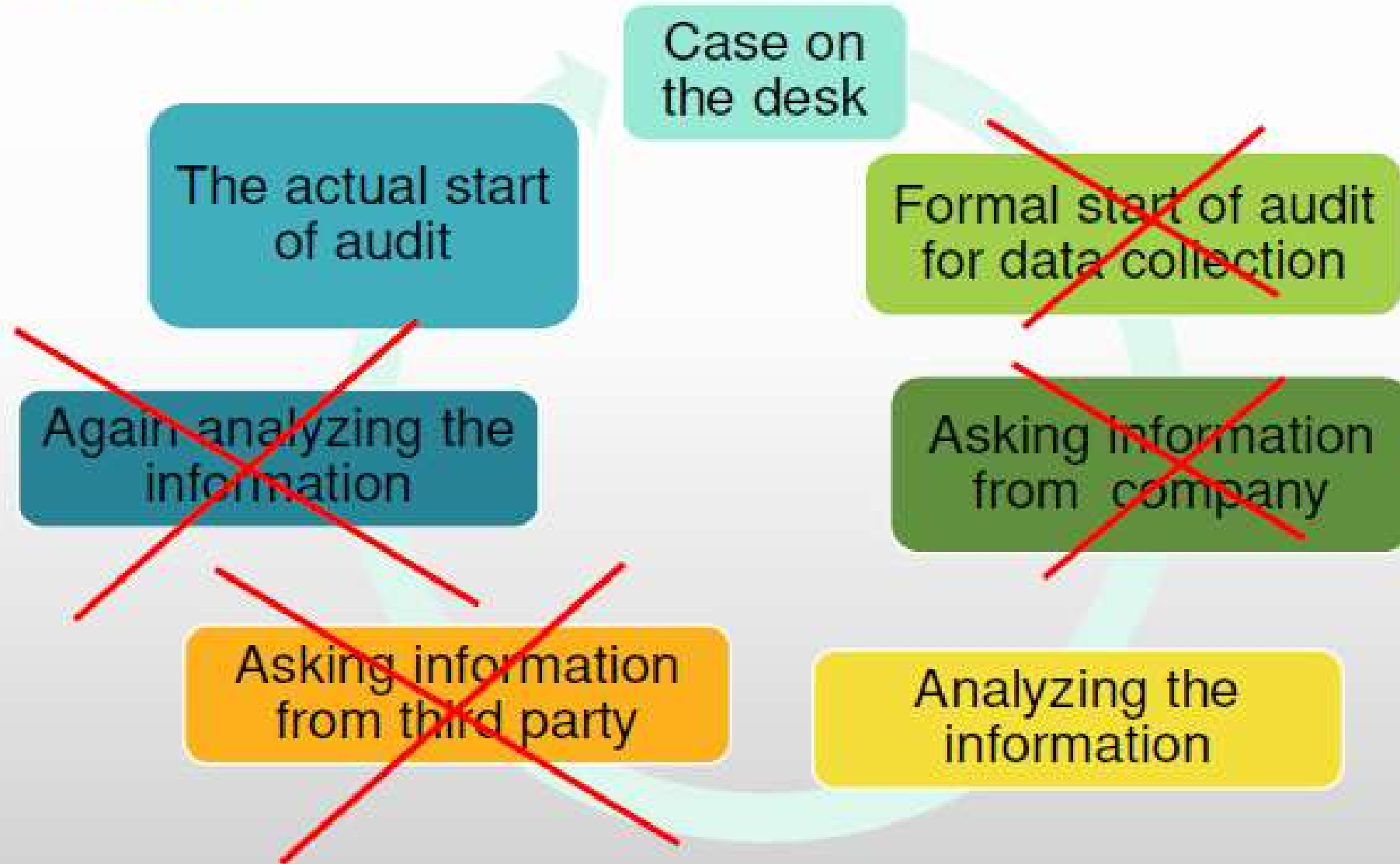# Case 2: VAT APPENDIX: information on all transactions over 1000€

VAT Appendix: to get information about the same transaction from both sides

Vendor
submits invoice

INVOICE
Sold to   Ship to

7000€

INVOICE
Sold to   Ship to

4000€

Client
receives invoice

Appendix A
to VAT Return
for
Issued Invoices

Appendix B
to VAT Return
for
Input Invoices

Risk Analysis in ETCB

Comparison

Comparison

VAT Return

VAT Return

Changes in audit department's workflow

Case on the desk

The actual start of audit

Formal start of audit for data collection

Again analyzing the information

Asking information from company

Asking information from third party

Analyzing the information

VAT APPENDIX:

BEFORE

- ✓ **a lot of resources went into asking necessary information from companies and third parties and delibarating on a need to start an audit**

NOW

- ✓ **Informational support for risk analysis**
- ✓ **information is already there,**
- ✓ **a decision on an audit is quick.**
- ✓ **fewer and quicker audits. Mostly councelling and consultation.**
- ✓ **business intelligence and data analysis**

Solution

- ✓ **A person who wants the benefit/discount, approaches the service specialist and authenticates herself with the ID card.**

- ✓ **The service specialist either uses the reader on inserts personal identification code into Unemployment Insurance Fund's database which activates the control procedure.**

- ✓ **Database generates a random control code (a 4-digit number) and the code is displayed on the screen.**

- ✓ **At the same time, the Fund's database sends the same code to the mobile phone of the customer that proves the right for the benefit/discount. The customer shows the text message to the service specialist.**

- ✓ **Service specialist compares codes and enables the benefit.**

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HUMAN RESOURCES

REPUBLIC OF ESTONIA
Tax and Customs Board

Requirements for in-house business analysts: knowledge of service design and design thinking

✓ **Envisioning (mind mapping, story telling, role play, design games etc)**

    ✓ **How to uncover customer needs?**

    ✓ **How do we do it together (people managing the business process, in-house IT and an IT partner)**

    ✓ **How to rethink business processes so that they match customer needs?**

✓ **Prototyping: testing, learning, improving**

DESIGN THINKING!

EMPATHIZE   IDEATE

DEFINE   BEES   PROTOTYPE

TEST

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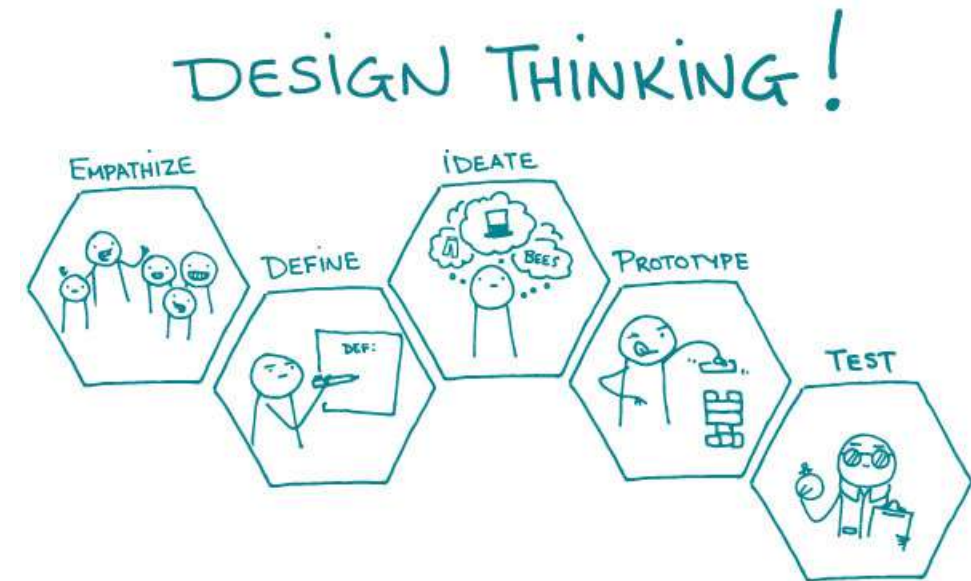
Requirements for in-house business analysts: knowledge of e-services development and IT system development

- ✓ **Business analysis and business process modelling**

- ✓ **Cost-benefit analysis**

- ✓ **Systems development lifecycle (analysis, design, UX/UI design, implementation, prototyping, testing, installation, evaluation, maintenance)**

- ✓ **Systems development methodology (agile, scrum, waterfall etc)**

- ✓ **Project management**

Requirements for all staff at ETCB: IT basics

- ✓ **X-road, movement of data**
- ✓ **Cyber security and data security**
- ✓ **Big data, data querys and reports, knowledge of analysis systems**
- ✓ **Asking data from customers**
- ✓ **Data analysis**
- ✓ **Service thinking, e-service thinking. How to be partners to in-house business analysts**
- ✓ **System testing**

Staffing and costs

- ✓ **Processes are different or no longer needed**
- ✓ **Core competencies are changing**
- ✓ **Key positions**
- ✓ **Changes in organisational structure, disappearing jobs, lay offs.**
- ✓ **Increase of salaries**
- ✓ **Staff costs vs cost of inaction**
- ✓ **IT investments are directly influencing staff costs**
- ✓ **New talent: internal hires and headhunting**

HR in software industry

- ✓ **Shortage of IT staff**
- ✓ **No (project) management in scrum projects**
- ✓ **New type of HR models in software industry**
- ✓ **Sofware industry HR runs on pay, incentives, well-being and relationship building.**

New goals?

Maksu- ja Tolliamet

Change of mindset first, digitalisation second

✓ **In order to digitalise (more), we need to change our mindset, behaviour and processes.**

✓ **Advising and consulting**

✓ **New self-service section in online tax and customs services:**

> ✓ **ETCB will analyse and visualise all tax data for businesses, including tax risk. Based on that businesses have to act and make corrections. If they don't, next step is auditing.**

✓ **To diminish work that can be done by technology**

✓ **Tax morality, growth of future tax base**

Overview of the tax environment and tax data to businesses

RISK ASSESSMENT
Both tax compliance and likelihood of tax audit

TAX MORALITY

BACKGROUND INFORMATION
Public data and information published to the extent permitted by a transaction partner
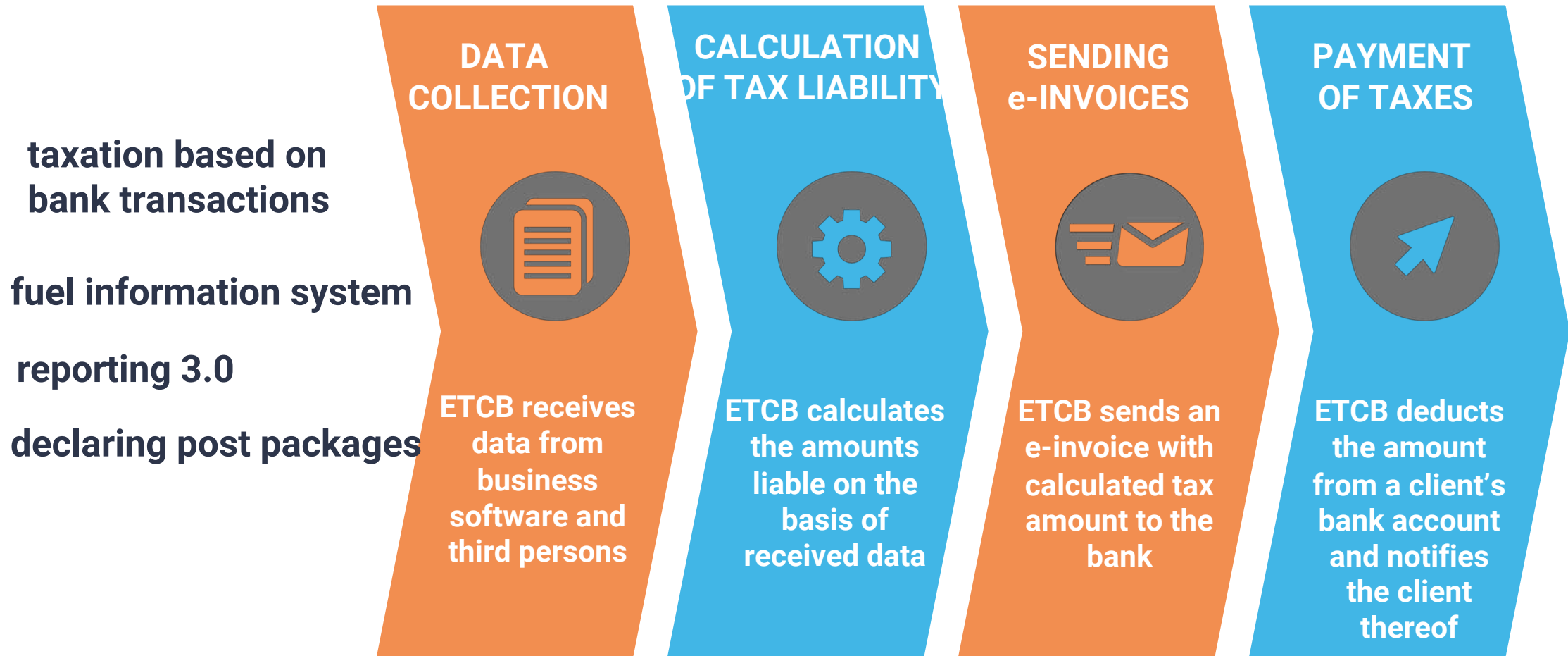

SUPPORT

STATISTICS
Including comparisons with other companies

TAX BASE

Maksu- ja Tolliamet

Declaration process will be replaced by data-driven information exchange

taxation based on bank transactions

fuel information system

reporting 3.0

declaring post packages

DATA COLLECTION

ETCB receives data from business software and third persons

CALCULATION OF TAX LIABILITY

ETCB calculates the amounts liable on the basis of received data

SENDING e-INVOICES

ETCB sends an e-invoice with calculated tax amount to the bank

PAYMENT OF TAXES

ETCB deducts the amount from a client's bank account and notifies the client thereof

Maksu- ja Tolliamet

Reading list

Estonia.eu

E-Estonia.com

https://e-estonia.com/e-residents/about/

Eesti.ee

https://www.mkm.ee/en/objectives-activities/information-society/information-society-services:

- **Green paper on the organisation of public services**

- **E-services design handbook**

Thank you!

REPUBLIC OF ESTONIA
TAX AND CUSTOMS BOARD