National Public Health Centre
under the Ministry of Health

Best practice of implementation of Joint Actions and project: HEALTHY GATEWAYS, STAMINA and other

Brigita Kairiene
Adviser of Quality Management and Communication Division

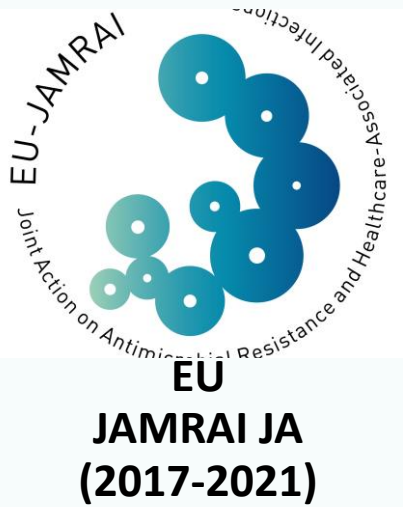2024-04-15
Vilnius

The list of the projects (history....) (1)

2006-2008   **2008-2011**   **2013-2016**   **2018-2021**

The list of the project....... (2)

EU
JAMRAI JA
(2017-2021)

STAMINA (2022-2023)

EU PERCH JA
(2022-2025)

EU
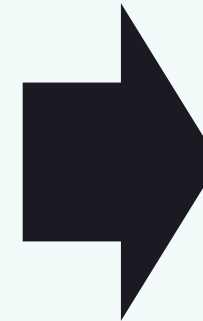UNITED4Surveillance
JA (2023-2025)

OTHER...

EU HEALTHY GATEWAYS JA: General objectives

Support **cooperation and coordination** between EU MS

Improve **capacities at PoE**

Prevent and **combat cross-border health threats** coming from the **transport sector**

Contribute to a high level of public health protection in the European Union
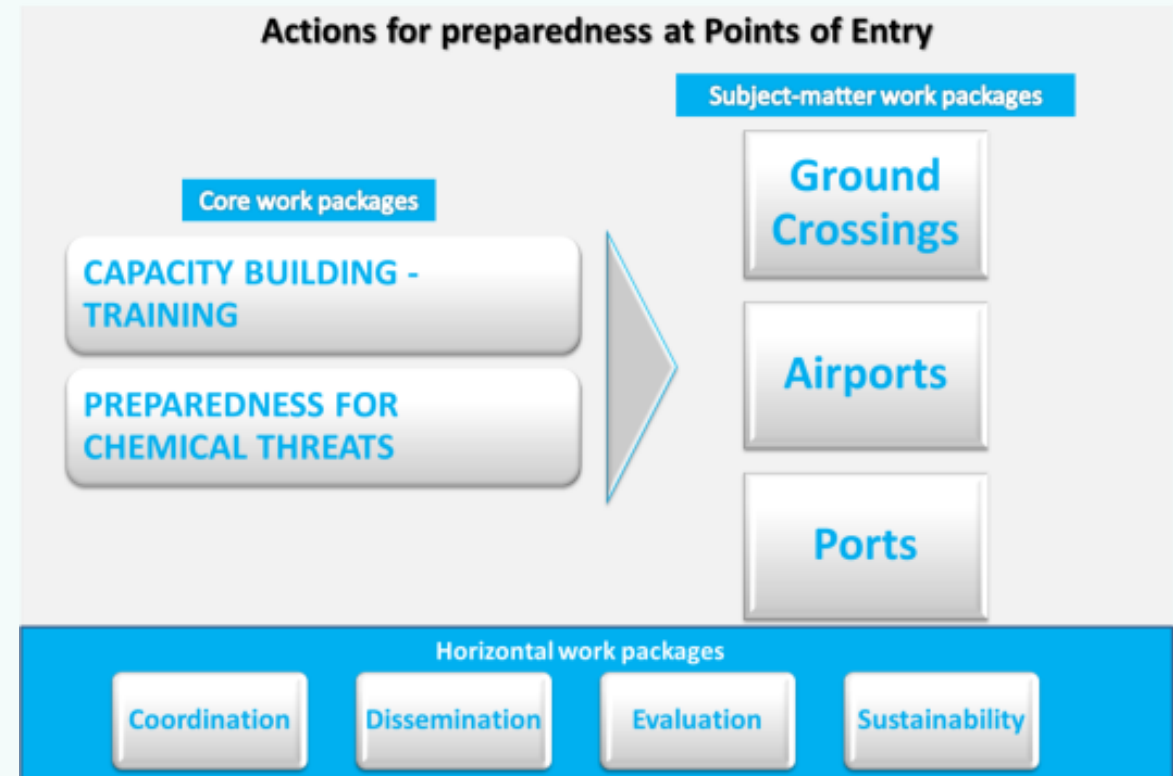
Consortium of partners

➢ **Duration:** 4 years (2018 → 2022)

➢ **Partnership:** 28 European countries + Taiwan CDC

Joint Action consortium
1st General Assembly Meeting (Hamburg, June 2019)

Actions for preparedness at Points of Entry

Core work packages

CAPACITY BUILDING - TRAINING

PREPAREDNESS FOR CHEMICAL THREATS

Subject-matter work packages

Ground Crossings

Airports

Ports

Horizontal work packages

Coordination Dissemination Evaluation Sustainability

Ground crossings specific activities

STATE OF THE ART REPORT

- **Scoping literature review on public health events related to ground crossings**

- **Survey results on preparedness and response to biological and chemical threats**

- **Identification of best practices implemented at ground crossings in Europe**

- **Transport connections between European Union and East and South-East Asia in aspect of vector introduction risk**

- **List of PoE with external borders of EU – over 100 identified**

- **Legal grounds for responding to serious cross-border public health threats (land borders) in EU countries**
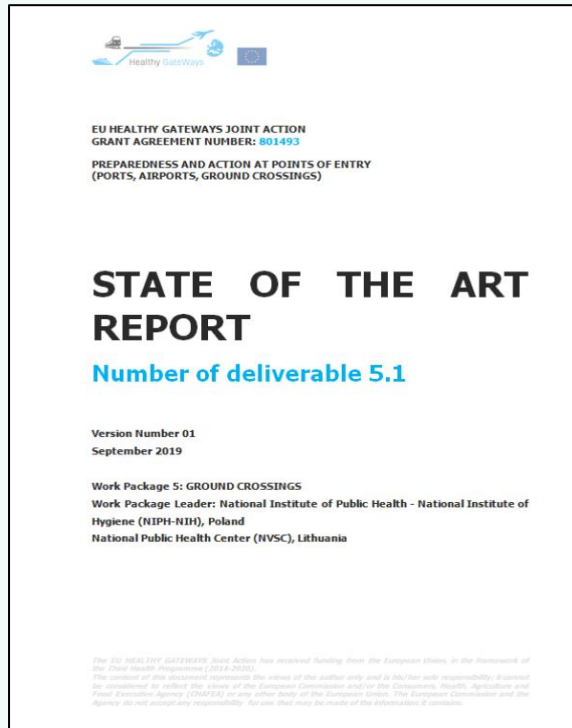
Model Memorandums of Understanding (MoUs):

1. Coordination on public health events of mutual interest **between EU and non-EU countries**

2. Rules of cooperation among the different competent authorities at **ground crossings at local level**

Air transport specific activities

- Draft tool for **contingency plan development/assessment** at airports

- Online catalogue of **best practices on core capacities implementation**

- Report on **legal framework of countries regarding contact tracing** for air transport

- Model **MoU** for rules of cooperation among the different competent authorities in airports

- SOPs for **vector surveillance and control** at airports

Maritime transport specific activities

- Online catalogue of **best practices on core capacities implementation**

- Tool for **contingency plan development and assessment** at ports

- SOPs for **vector surveillance and control** at ports

- Model **MoU** for rules of cooperation among the different competent authorities in ports

- Guidelines for **inter-country communication & information flow** in outbreak investigation and public health event management

- Multi-sectorial **table top exercise at European level** for ports

- European scheme for **inspections of passenger ships**

Cross-cutting activities

EU PoENET

- Web-based network of European points of entry

- Includes bibliography tool, discussion forums, network of professionals, training resources catalogue

Risk profile tool

- Assess risk profile for points of entry and determine **top/simulation** which have the highest risk

- Web-based, covering infectious diseases

Chemical activities

- Training materials and webinars available

- Guidance and assessment tool for chemical preparedness at points of entry

Table exercises at national and local level

- Guidance for countries to conduct exercises (focused on points of entry)
- Guidance and scenario summaries to test local public health emergency contingency plans at ports, airports, ground crossings

Training activities

Self-paced training courses and materials:

Preparedness and response to public health events at airports (EU HEALTHY GATEWAYS 2019)

Preparedness and response to public health events at ports (EU HEALTHY GATEWAYS 2019)

Evidence-based best practices on entry/exit screening for infectious diseases in humans (DG SANTE 2019)

Two EU level training of the trainers' courses and one workshop conducted
Preparedness and response to public health events at:

- Ports (Greece, 2019)
- Airports (Serbia, 2019)
- Grounds crossing (Lithuania, 2021)

- Participation of non-EU countries funded by WHO EURO and WHO EMRO

COVID-19 interim advice
(14 documents, select translations in 4 national languages)

Healthy GateWays

POINTS OF ENTRY

- Public health measures at points of entry **(27/01/2020)**
- Exit and entry screening at points of entry **(06/02/2020)**
- WHO, WHERE, HOW: Overview of personal protective equipment for staff at points of entry and crew on conveyances **(27/02/2020)**
- Reducing droplet transmission of COVID-19 on board conveyances by using face masks **(09/04/2020)**
- General guidance for restarting transportation activities to serve tourism after lifting restrictive measures in response to the COVID-19 pandemic **(15/05/2020)**

GROUND CROSSINGS

- Preparedness and response to cases of COVID-19 (buses and bus stations) **(04/03/2020)**
- Preparedness and response to cases of COVID-19 (trains and rail stations) **(04/03/2020)**

AVIATION

- Aircraft operators for preparedness and response to the outbreak of 2019-nCoV acute respiratory disease **(27/01/2020)**
- Considerations for implementing a common strategy for testing of travellers for SARS-CoV-2 at international airports in EU MS **(13/10/2020)**

MARITIME

- Ship operators for preparedness and response to the outbreak of COVID-19 **(27/01/2020)**
- Health authorities and ship operators suspending sailings and for long-term docking during COVID-19 pandemic **(18/03/2020)**
- Suggested procedures for cleaning and disinfection of ships during the COVID-19 pandemic **(06/04/2020)**
- Preparedness and response to cases of COVID-19 on board ferries after lifting restrictive measures in response to COVID-19 **(24/06/2020)**
- Restarting cruise ship operations after lifting restrictive measures in response to COVID-19 **(30/06/2020)**
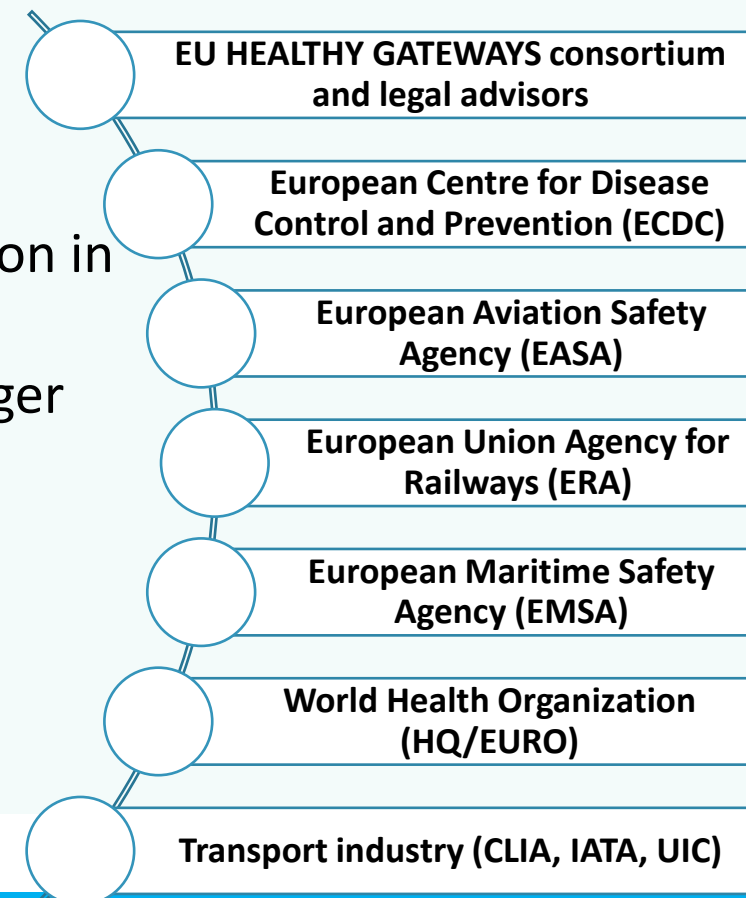
EU Digital Passenger Locator Form (dPLF)

EU PLF

European Union Passenger Locator Form
www.euplf.eu

Working group and input from:

- EU HEALTHY GATEWAYS consortium and legal advisors
- European Centre for Disease Control and Prevention (ECDC)
- European Aviation Safety Agency (EASA)
- European Union Agency for Railways (ERA)
- European Maritime Safety Agency (EMSA)
- World Health Organization (HQ/EURO)
- Transport industry (CLIA, IATA, UIC)

- Activity being implemented by the EU HEALTHY GATEWAYS joint action in coordination with DG SANTE, DG MOVE and support from EASA for developing a web-based application for the European Digital Passenger Locator Form (dPLF)

- Covers all transport modes
  - Air transport
  - Ground crossings (bus, train car)
  - Maritime transport (cruise, ferry)

18-20th May, 2022
Spain, Alicante
Organizer: Ministry of Health, Spain
Practice language: Spanish

Aim of the exercise:

- To assess the ability of stakeholders to respond promptly to public health threats at entry points in accordance with international health rules.
- To evaluate communication between the various authorities involved in the management of communicable diseases.
- Establish and strengthen interinstitutional cooperation.
- Assess the compatibility of the action plans of the different authorities.
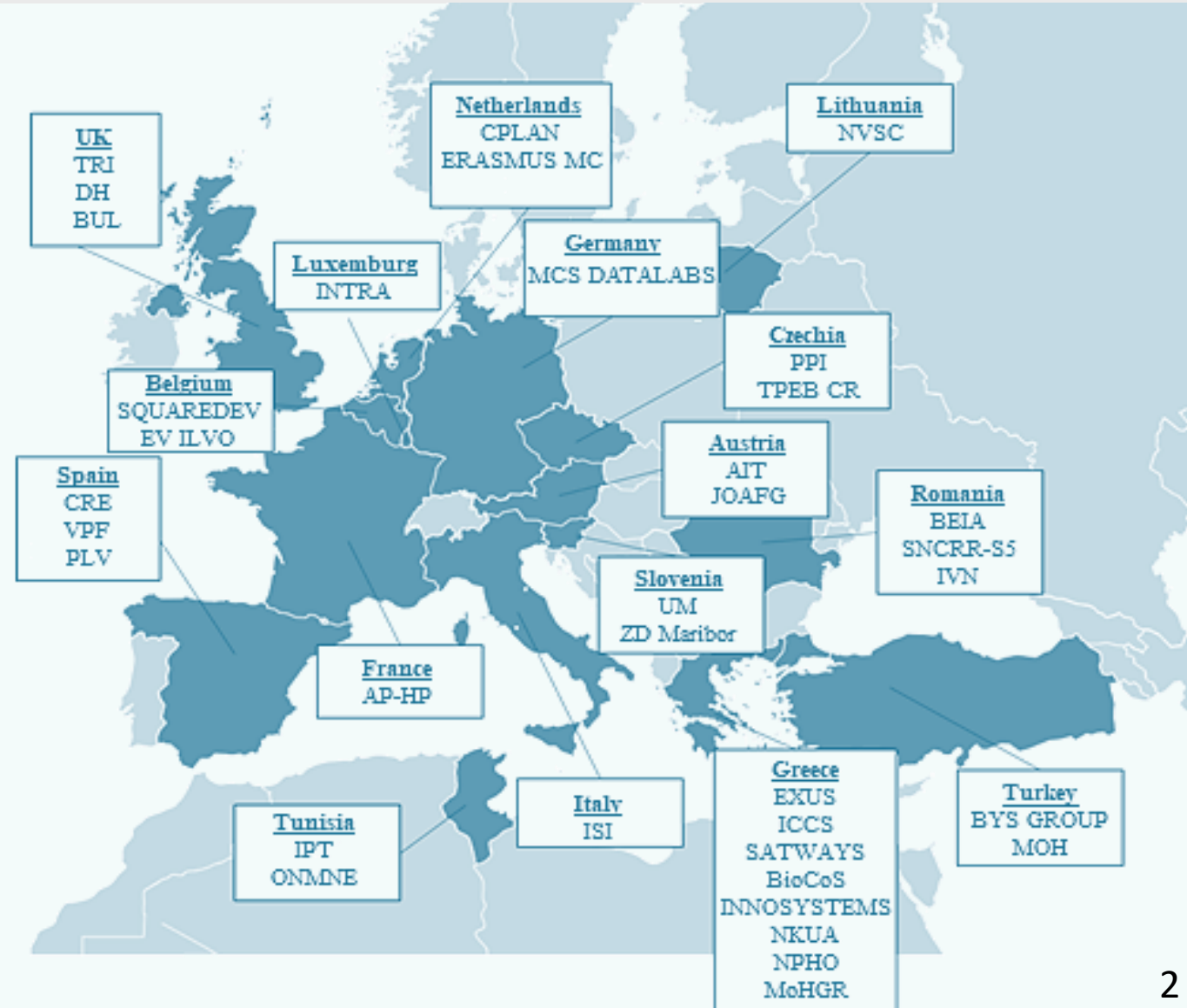
STAMINA Objectives [1/2]

- Perform and extensive **gap analysis** in existing **preparedness and response plans** and relevant legacy systems on a national and EU level

- Study human behaviours that allow outbreaks to spread and define guidelines on public trust monitoring and correct implementation of risk communication principles

- Support **data interoperability** of national and regional systems with the STAMINA decision-support toolset to provide **improved decision making** with a very high user acceptance

- Familiarise local authorities with EU and STAMINA-developed tools, providing EU with **better, timelier, data**, by performing targeted demonstration activities.

- Enable outbreak **evolution forecast** taking into account all factors accelerating pandemics

STAMINA Objectives [2/2]

STAMINA

- Provide new diagnostic capabilities through the exploitation of bioinformatics and **low-cost highly accurate point-of-care testing (POCT)** devices to diagnose diseases earlier than before

- Organize **preparedness and response simulation exercises** that include extensive Training and Field Demonstrations

- Refine the strategic and operational **Cross-Organisational Guidelines** for preparedness and response to improve coordination at all levels (nationally and internationally)

- Propose and validate a **standardised scheme for interoperability** (information exchange) and personnel management procedures of different actors for preparing for and responding to crisis

- Establish new strong partnerships between the Member States as a result of the project

Multiple Solutions against the Pandemic

STAMINA

STAMINA data

Historical Datasets

Open Datasets

Web and Social Media

Previous Lessons Learned

Experts Opinions

STAMINA predictive models

PALMS (Health and **cost benefit**)

AIR (Antimicrobial Resistance)

BIMS (**climate** models in predicting the **spatio-temporal evolution** of a disease)

FLEE (**Movement of people and goods**)

GLEAM (Simulation of various infectious diseases on global scale)

FACS (Flu and Coronavirus Simulator with geospatial data, epidemiological data, disease parameters, demographics)

CHARM (Dynamic reconfiguration of hospital wards for **bed capacity planning** during pandemic outbreaks)

STAMINA solutions

Early Warning System (EWS)

Crisis Management Tool (CMT)

Real-time Web and Social Media Analytics (RWSMA)

Preparedness Pandemic Training tool (PPT)

Common Operational Picture (COP) platform

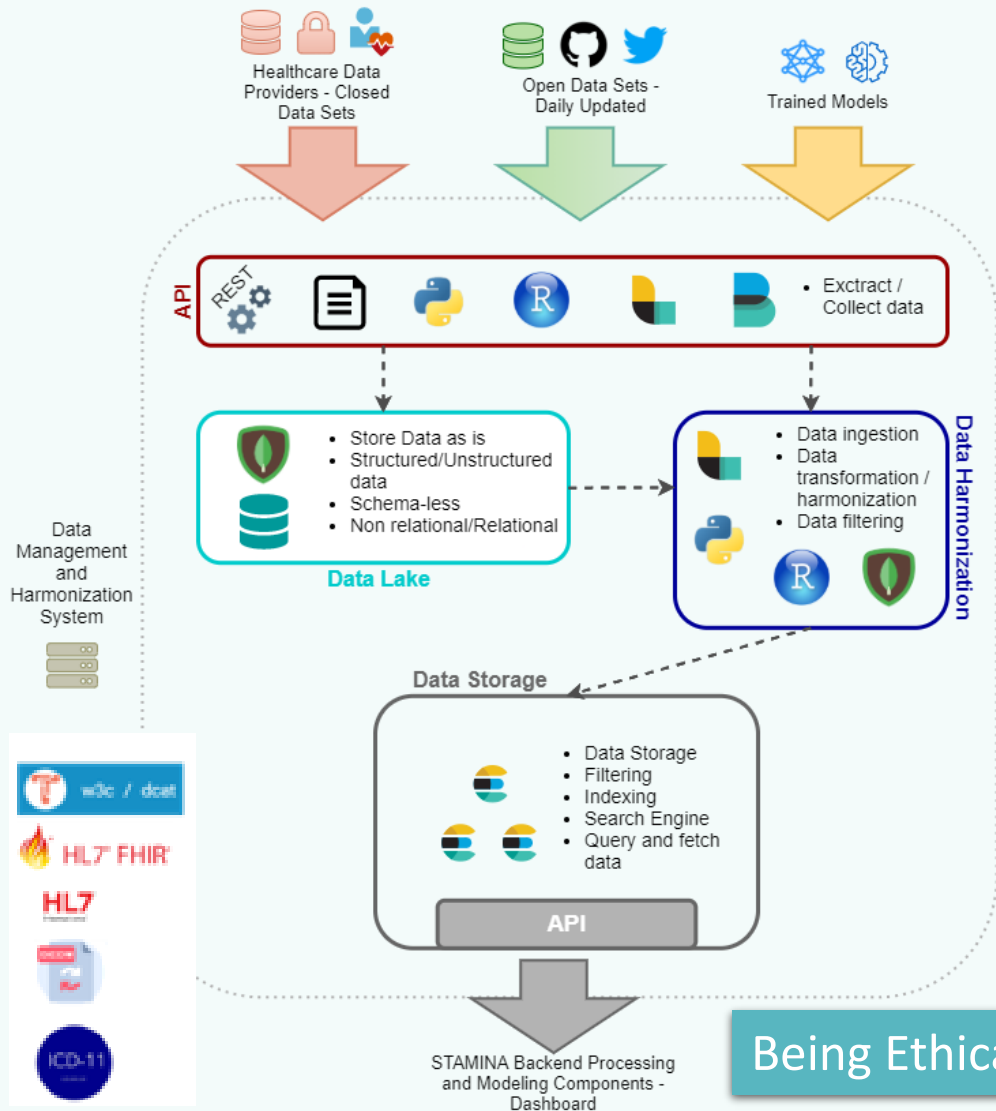Detection tools and Smart wearable devices for health monitoring
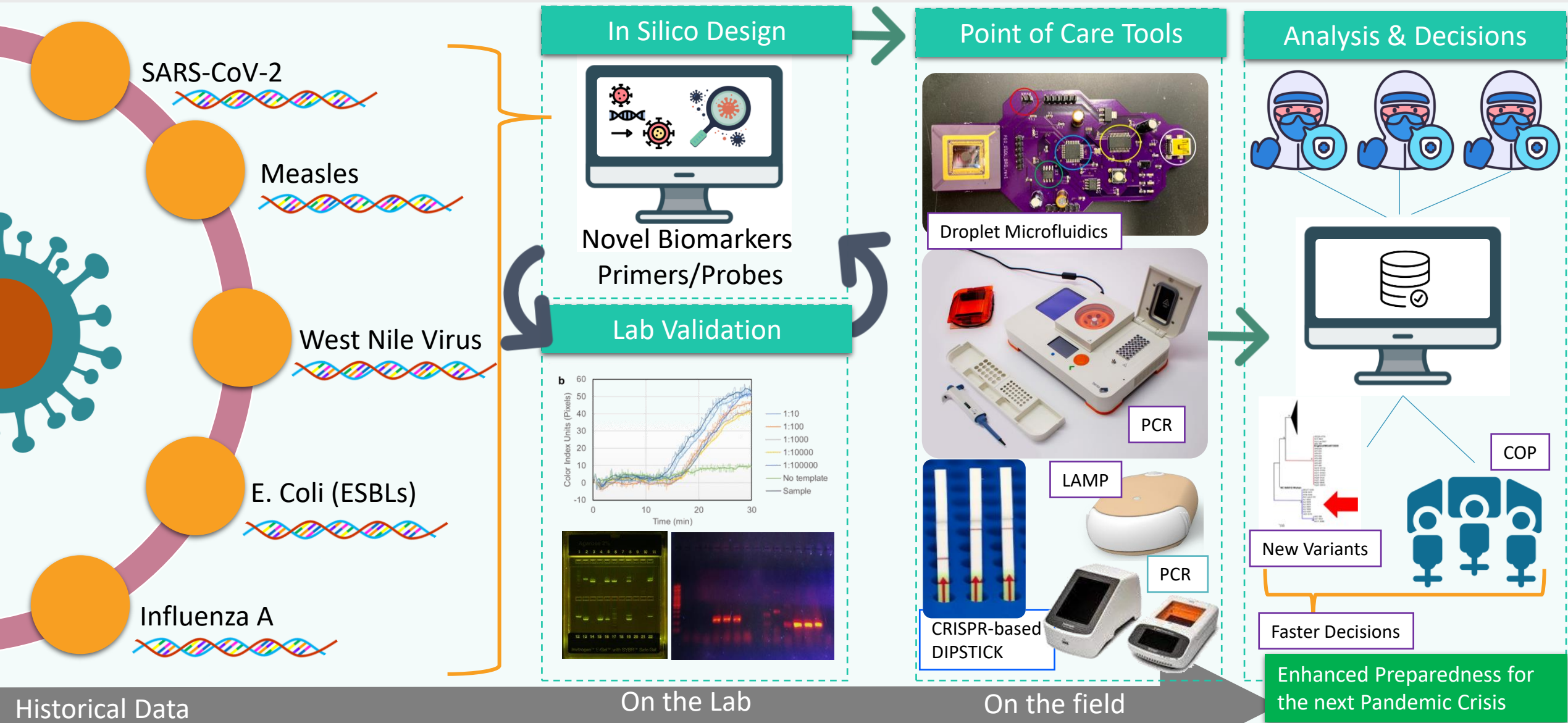
First responders

National planners

Inventory of best practices and guidelines to improve preparedness and response

3

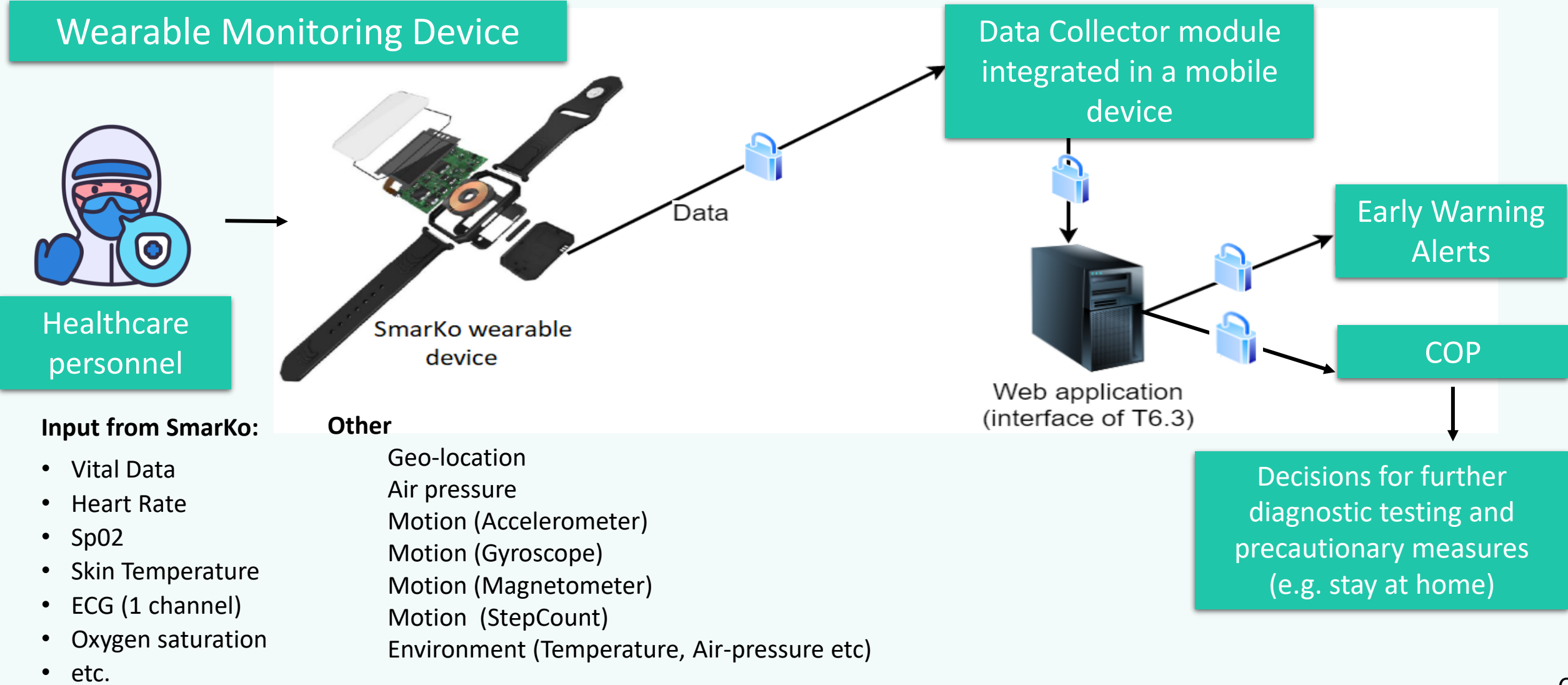# Harmonized and Secure data management according to standards
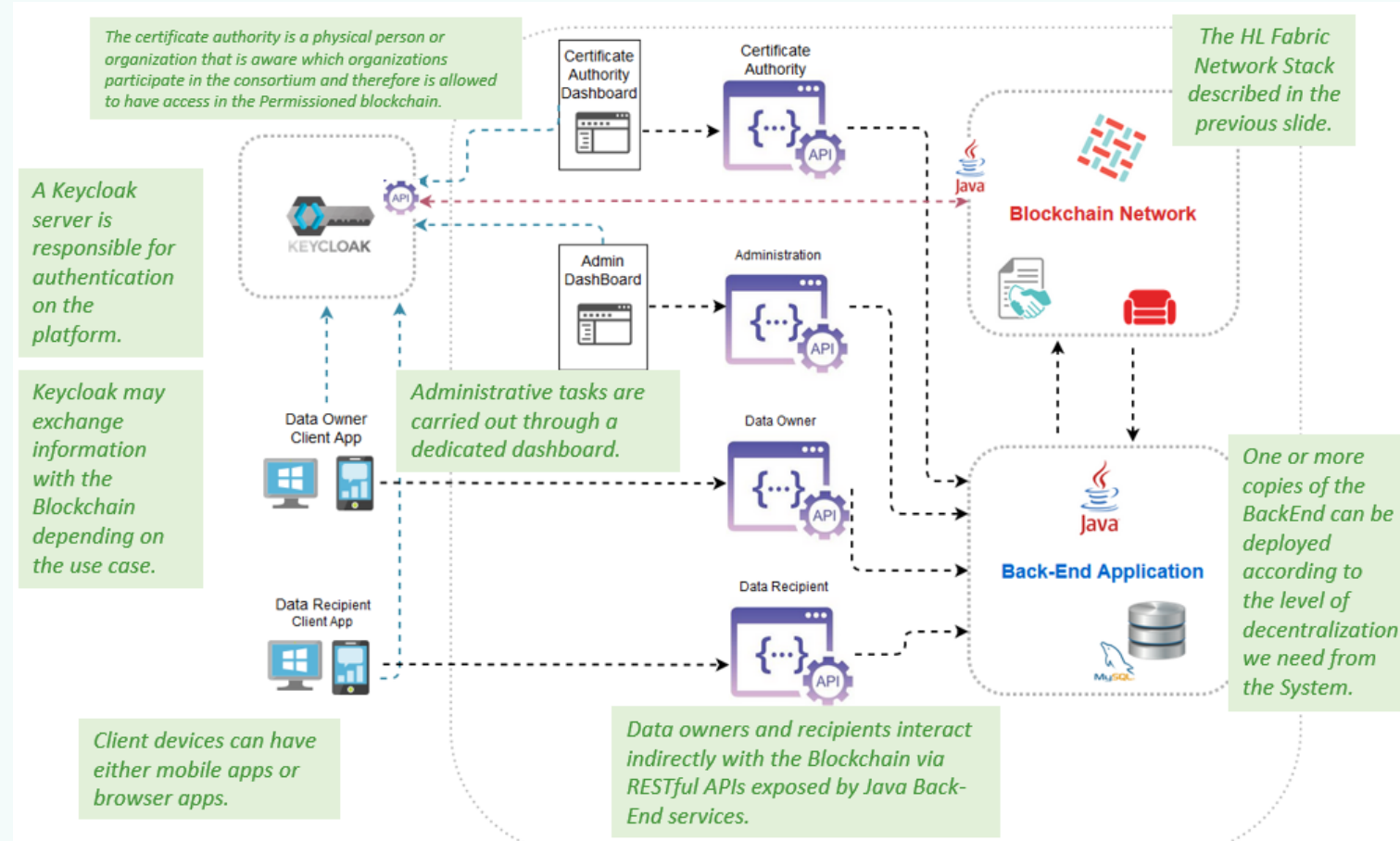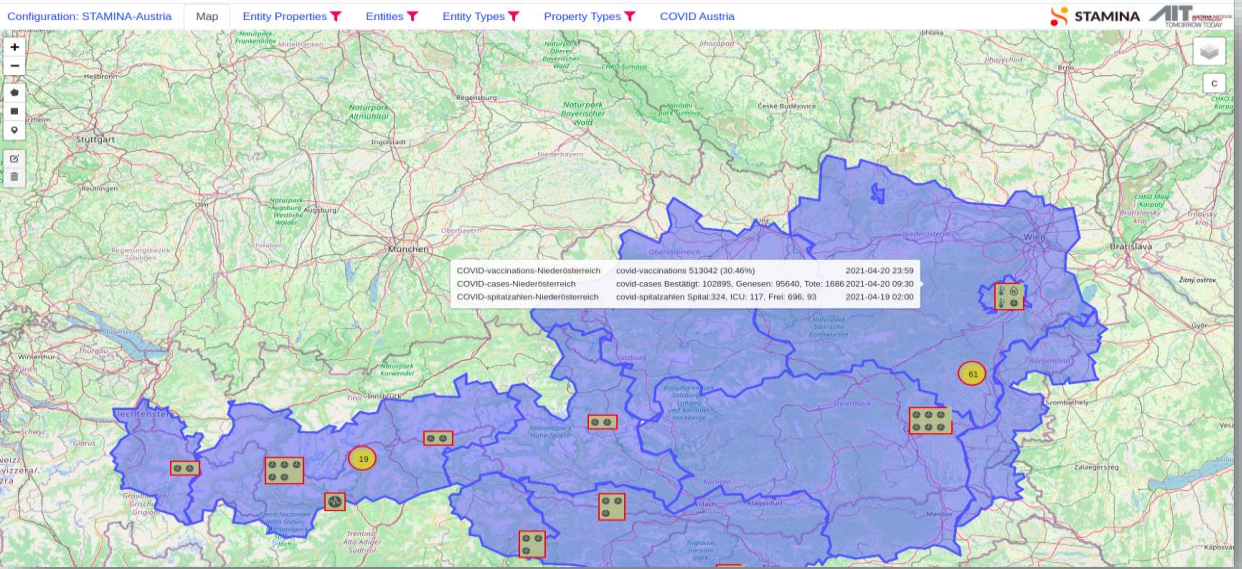

Being Ethical and Secure by Design

Protecting our ...Heroes!

STAMINA

Wearable Monitoring Device

SmarKo wearable device

Data

Data Collector module integrated in a mobile device

Web application (interface of T6.3)

Early Warning Alerts

COP

Decisions for further diagnostic testing and precautionary measures (e.g. stay at home)

Healthcare personnel

Input from SmarKo:

- Vital Data
- Heart Rate
- Sp02
- Skin Temperature
- ECG (1 channel)
- Oxygen saturation
- etc.

Other

Geo-location
Air pressure
Motion (Accelerometer)
Motion (Gyroscope)
Motion (Magnetometer)
Motion (StepCount)
Environment (Temperature, Air-pressure etc)

6

Bringing Common Operational Picture into the Healthcare setting

The STAMINA Methodology (STADEM)

The STADEM Methodology

- Development of the **taxonomy of pandemic functions** based on:
  - Trial descriptions of trial owners
  - End user requirements (establish a relation between gaps and pandemic functions)

- Development of the STADEM methodology based on the **Trial Guidance Methodology from DRIVER+**

- **Preparation, Execution, and Evaluation** of the STAMINA trials
  - Application of STADEM
  - In addition, use cases are used as support for the trial preparation
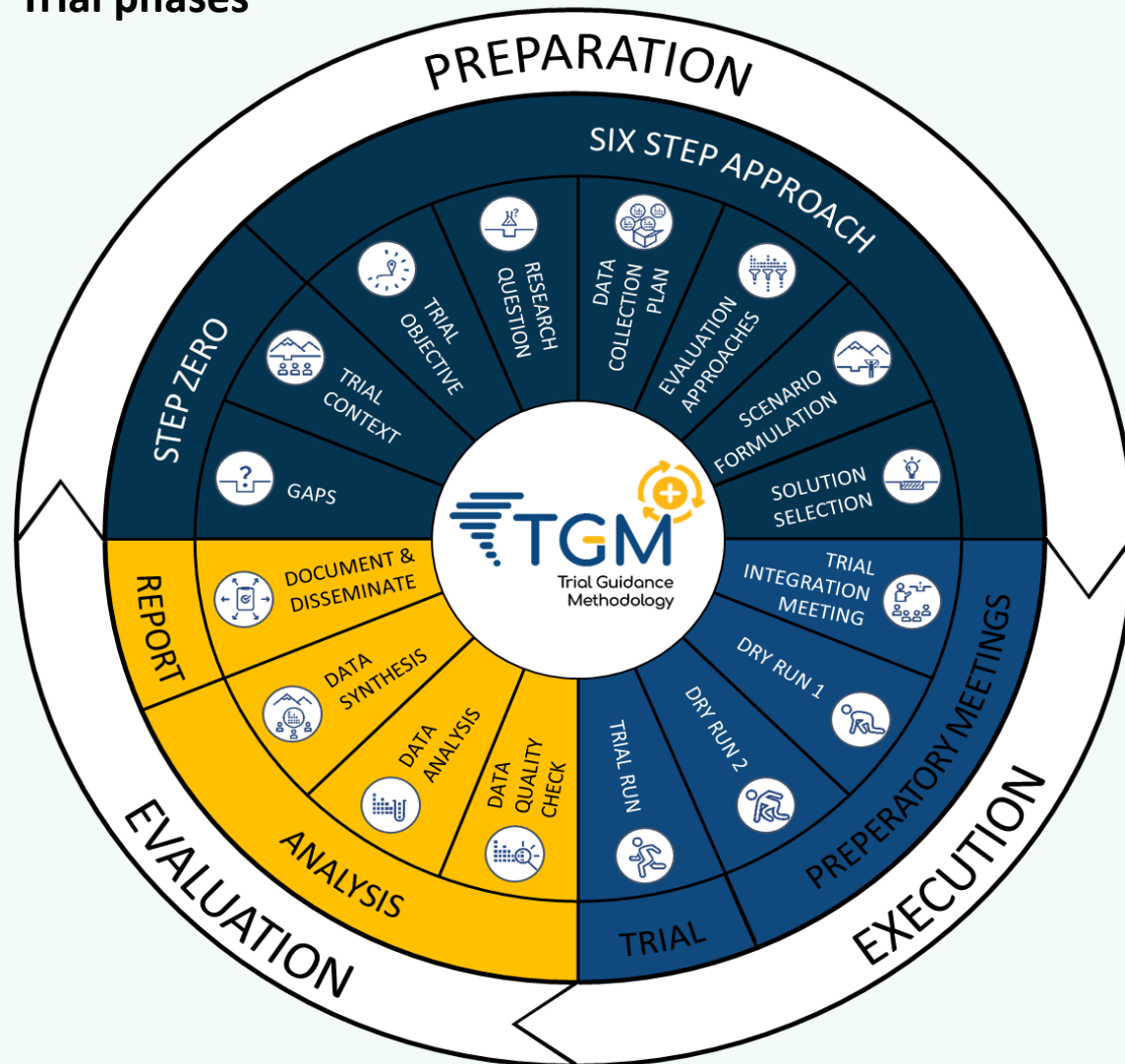

		EU Standard

CEN Workshop Agreement (2020) Systematic assessment of innovative solutions for crisis management - Trial guidance methodology

CEN Workshop Agreement (2022) Assessing Pandemic Crisis Prediction and Management Tools – Methodology of Demonstration-based Evaluation

9

STADEM/The Trial Guidance Methodology STAMINA

Trial phases

The Trial Guidance Methodology was based in the EU Project DRIVER+ and is a rigor, yet pragmatic methodology for an **objective assessment** of innovative **socio-technical solutions** in the area of Crisis and Disaster Management (encompassing **Pandemic Management**)
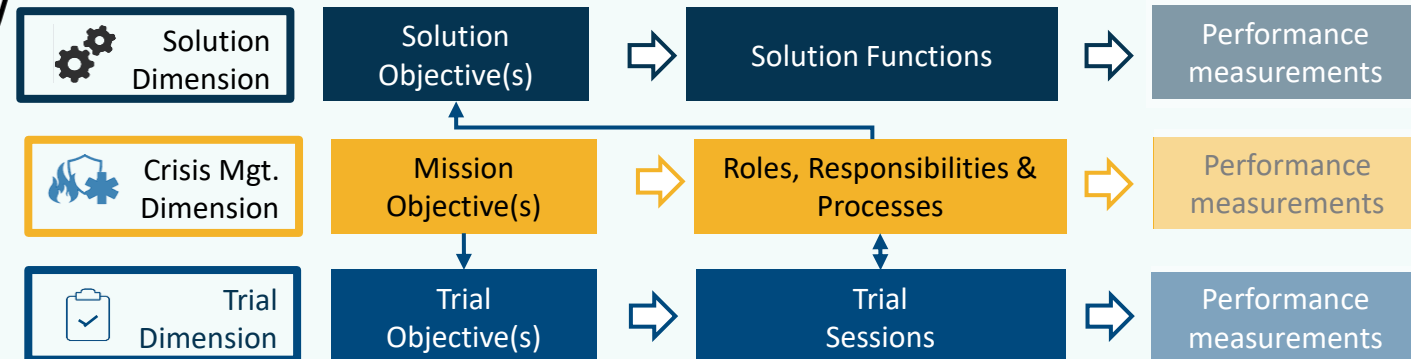
- **Solution dimension:**
  - the influence that a solution (its use, functionalities etc.) has on the trial
  - the added-value a solution brings to CM functions
  - practitioner assessment of the solution
- **Crisis management dimension:**
  - the influence the crisis management (roles, responsibilities, etc.) has on the trial
  - the impact that a solution has on the performance of the CM organization
- **Trial dimension:**
  - the influence the trial organization (logistics, availability of key staff, hardware, software, etc.) has on the trial
  - the changes that the trial organization brings to the success of the trial

Sustainability

Agreement with London Brunel university for the development of FACS tool.

What is FACS?

- Modelling tool for simulating the spread of influenza and COVID-19 (coronavirus infection) in a local region (now measles is added)
- Includes various aspects of disease spread
  - The movement of the population
  - Age-dependent vulnerability, immunities and mortality of the population
  - Pattern of disease spread according to time-varying immunity
- Answers questions related to decision making (**what if** scenario)
  - Restriction policy
  - Vaccination strategies

UNITED4Surveillance
Gaps identified by the pandemic

EU's preparedness and responses to the COVID-19 pandemic were sub-optimal

Health security framework

Stronger EU cross border health threaths

Stronger ECDC

New emergency framework (EMA)

UNITED4Surveillance at glance

36 months

25 EU countries

41 partners:

- public health

- clinical (mikrobiology)

- epidemiology

- data science

Total cost: 8 749 521,59 €

Coordinator
National Institute for Public Health and Environment

UNITED4Surveillance objectives

The goal of UNITED4Surveillance is to assist member states and the EU in the deployment of digitalized, integrated surveillance systems, operating both at national and European levels, to ensure better detection of early warning signs and more accurate risk assessment and coordinated response among the member states to any future cross-border health threat.

UNITED4Surveillance structure
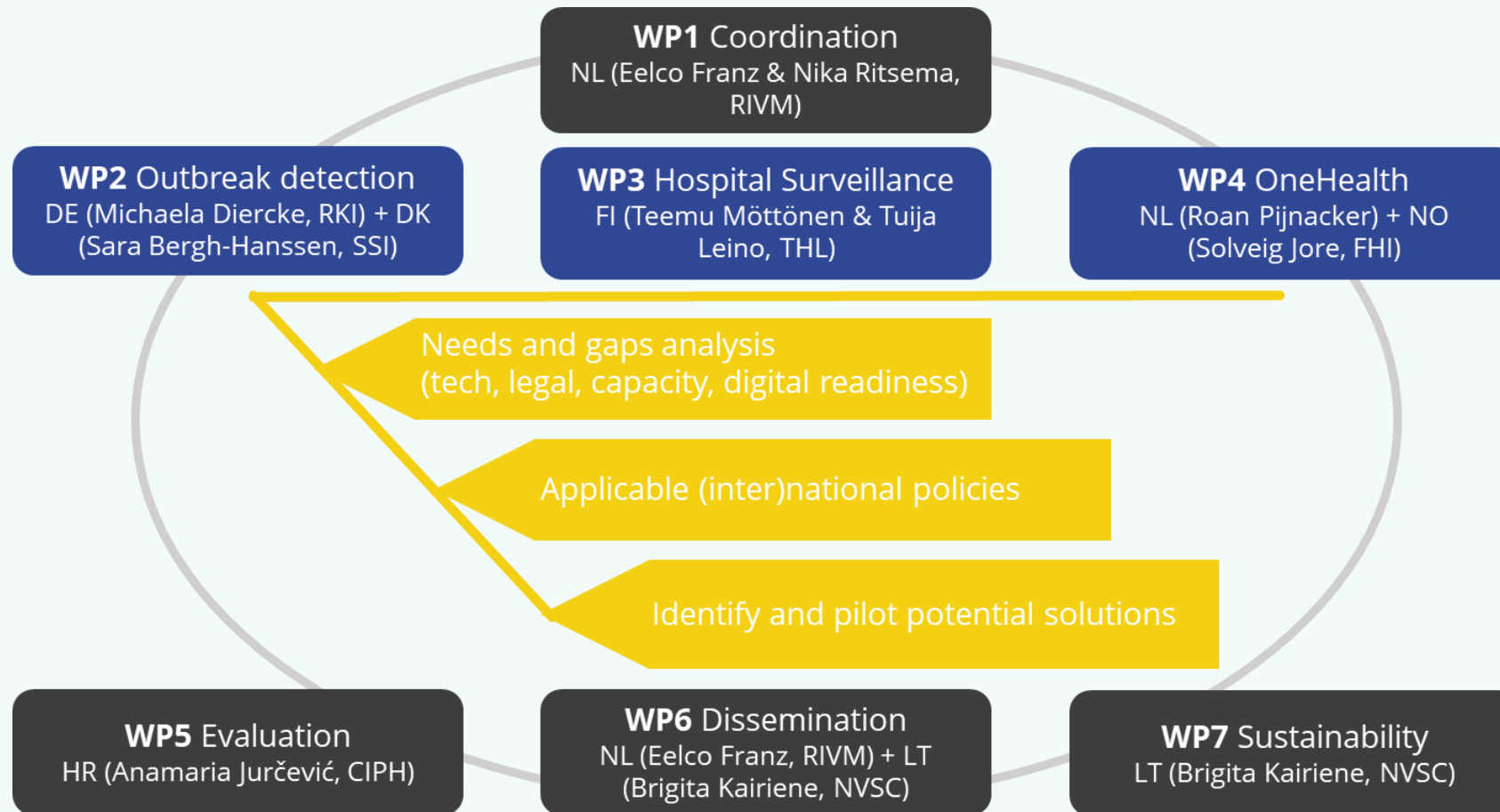
Work package 2: Outbreak detection
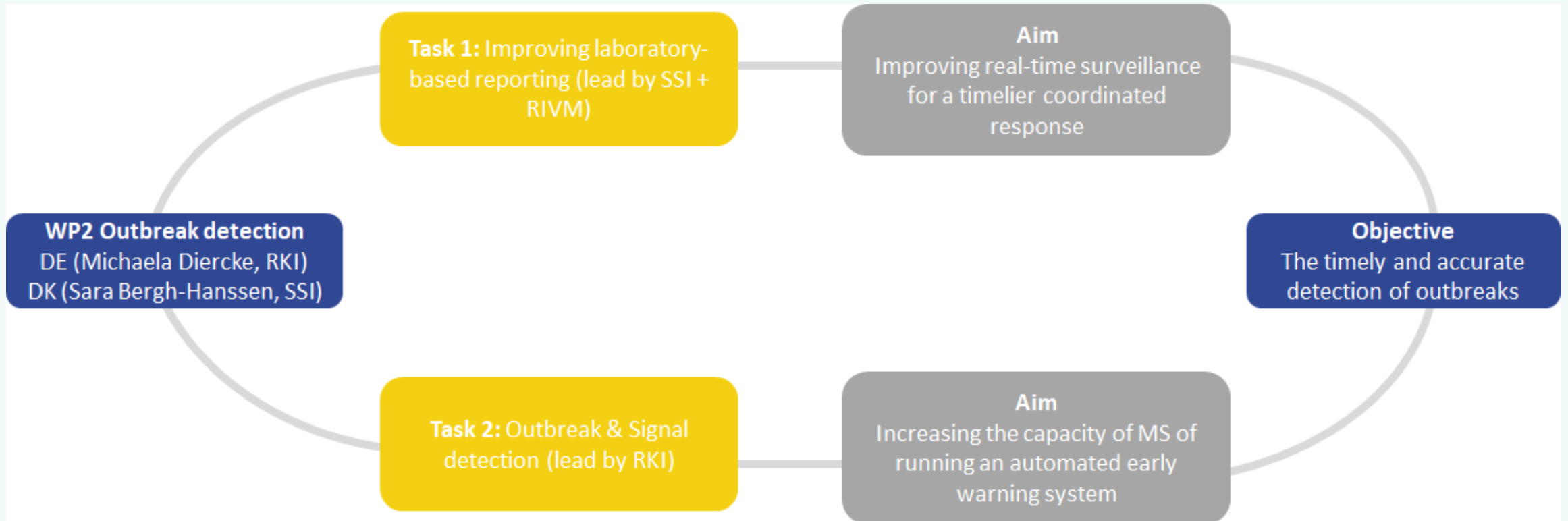
Task 1 "Improving Laboratory-Based Reporting"

Objective: Improving real-time surveillance for a timelier coordinated response

Background: The SARS-CoV-2 pandemic has highlighted that timely sharing of laboratory test results is crucial for an informed response during an unfolding epidemic. Many countries experienced challenges and delays in sharing of test results - a specific challenge is the sharing of genetic data, due to its complexity.

Subtask 1: Needs and gap analysis with regards to lab-based reporting & relation to national policies

Subtask 2: Data standards/Development of logical data model for genotyping/subtyping

Task 2 – Outbreak & Signal Detection

Aim: Development and deployment of tools for the timely and accurate detection of outbreak in surveillance data

➢Increase the capacity of MS running an automated early warning system

Background: Early detection of infectious disease outbreaks can help reduce the further spread and reduce harmful consequences.

Automated tools can help manage and foster analysis across different datasets especially when human resources are scarce.

Subtask 1: Review of outbreak detection activities

Subtask 2: Benchmarking of outbreak detection methods

Subtask 3: Tool development

Subtask 4: Piloting

Work package 3: Hospital Surveillance

The aim of WP3 is to build a foundation for timely, comparable, and representative surveillance of severe infections leading to hospitalization.

Task 1: Establish or improve sentinel-based electronic surveillance of serious infectious diseases or syndromes from hospitals in participating Member States.

Task 2: Integrate clinical information on hospitalized patients with microbiological data (typing and microbial resistance*), in Member States using nation-wide register-based public health surveillance*
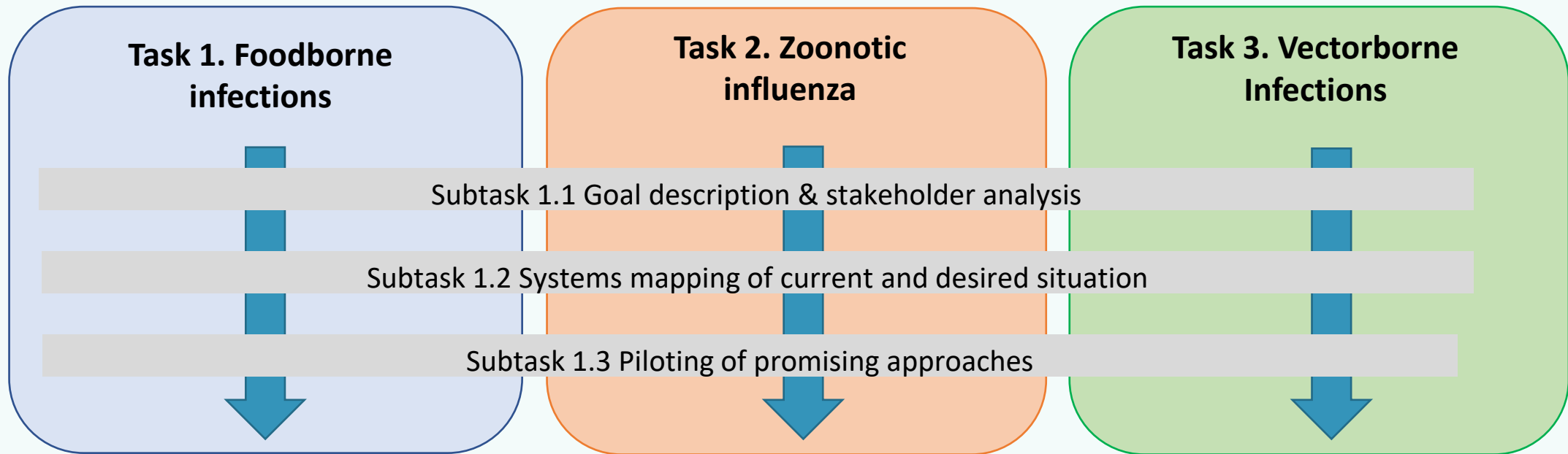
Nacionalinis
visuomenės
sveikatos
centras