

# SORMAS Foundation & ITK Engineering



Presentation for  **RaDAR**

12 April 2023

# The Surveillance, Outbreak Response Management and Analysis System (SORMAS)

# Relevant technical features



Open-source software (does not depend on licenses)



Data and security protection (GDPR)



Visual dashboard



Web and App (synchronized) versions, online and offline use



Multilingual



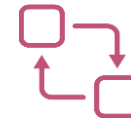
Task manager for users



Real-time data transfer



Laboratory module



Interoperable with other systems



User-specific access

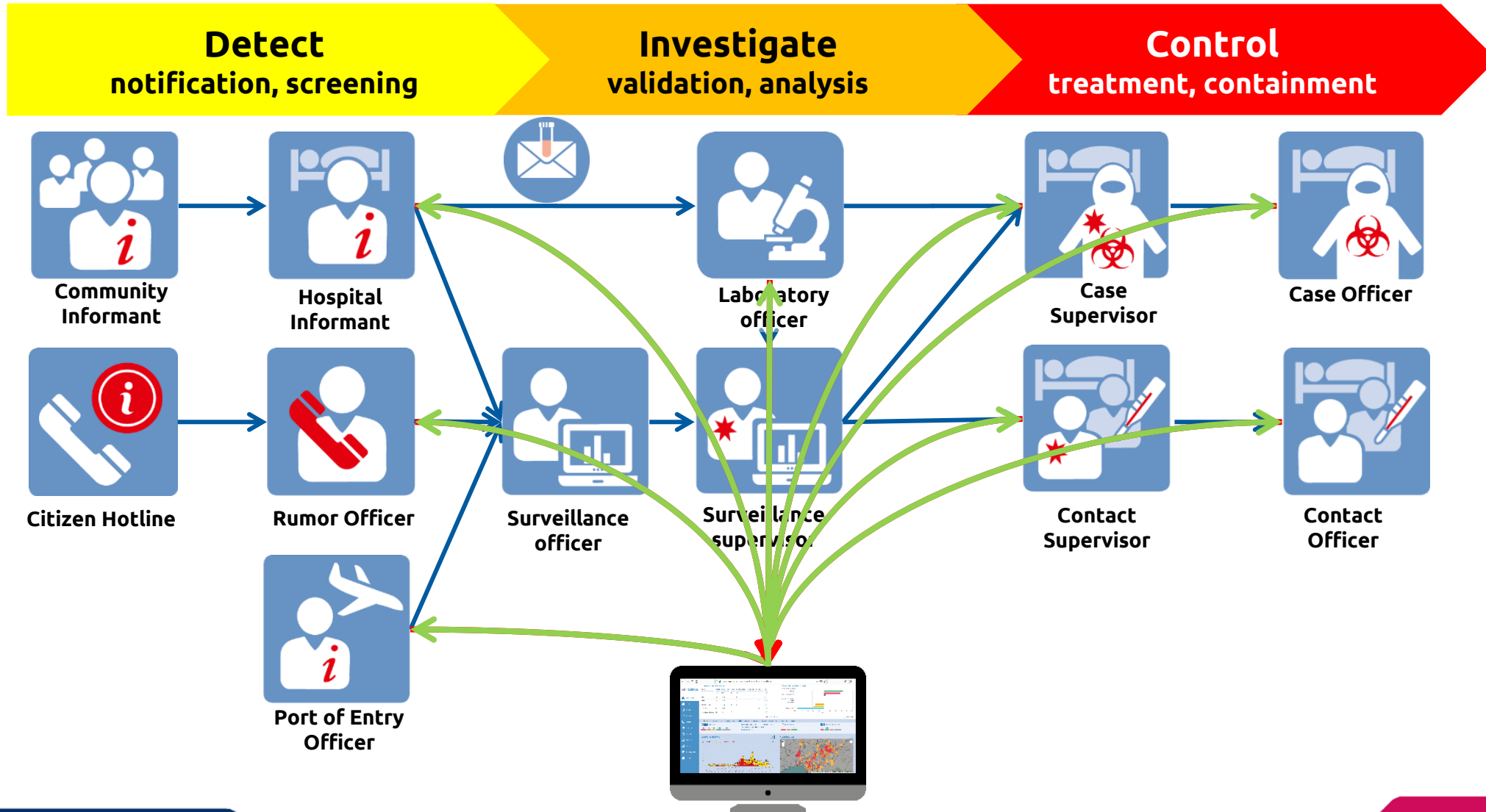


Automatic document generation (e.g. certificates)



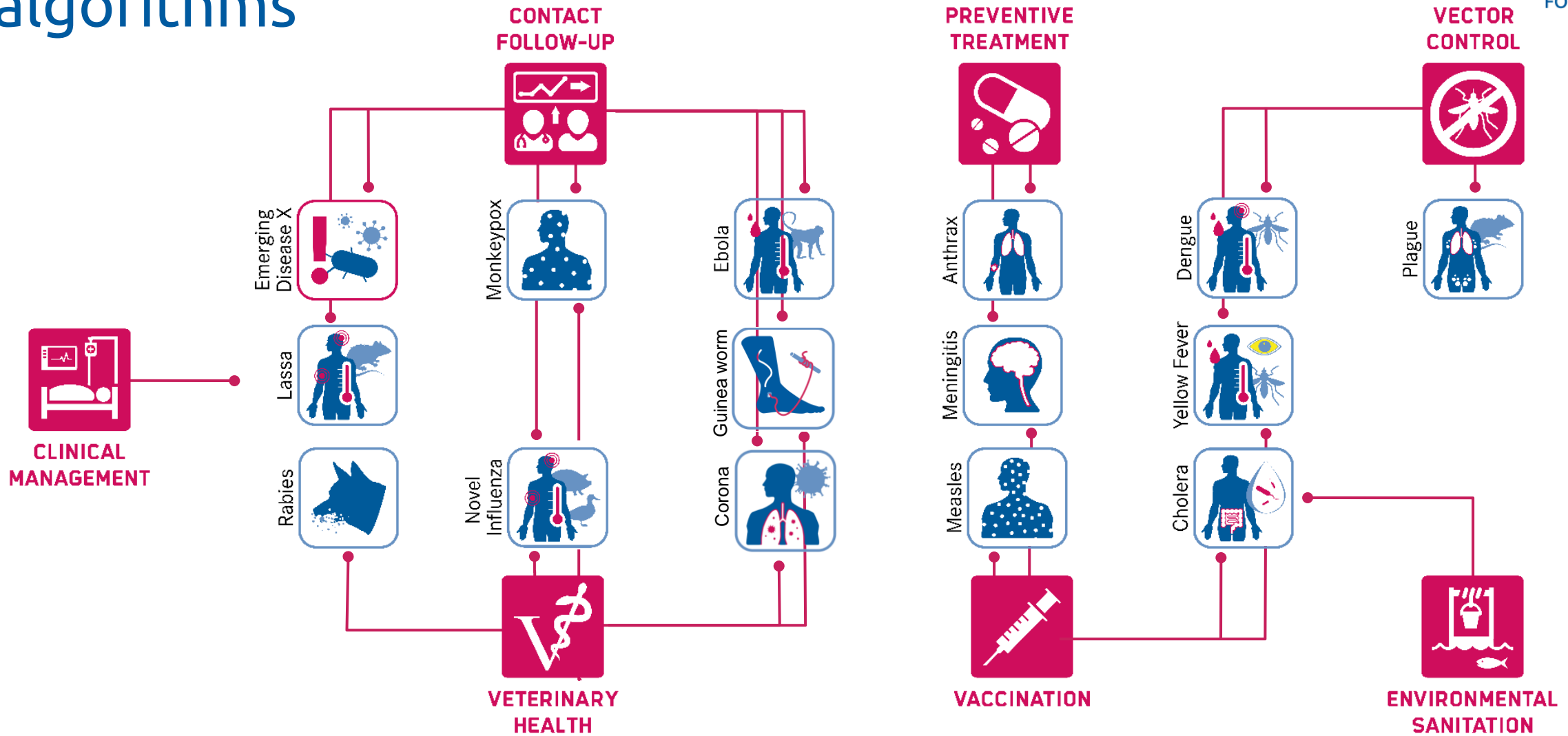
Cross-border data transfer

# Response Management in SORMAS

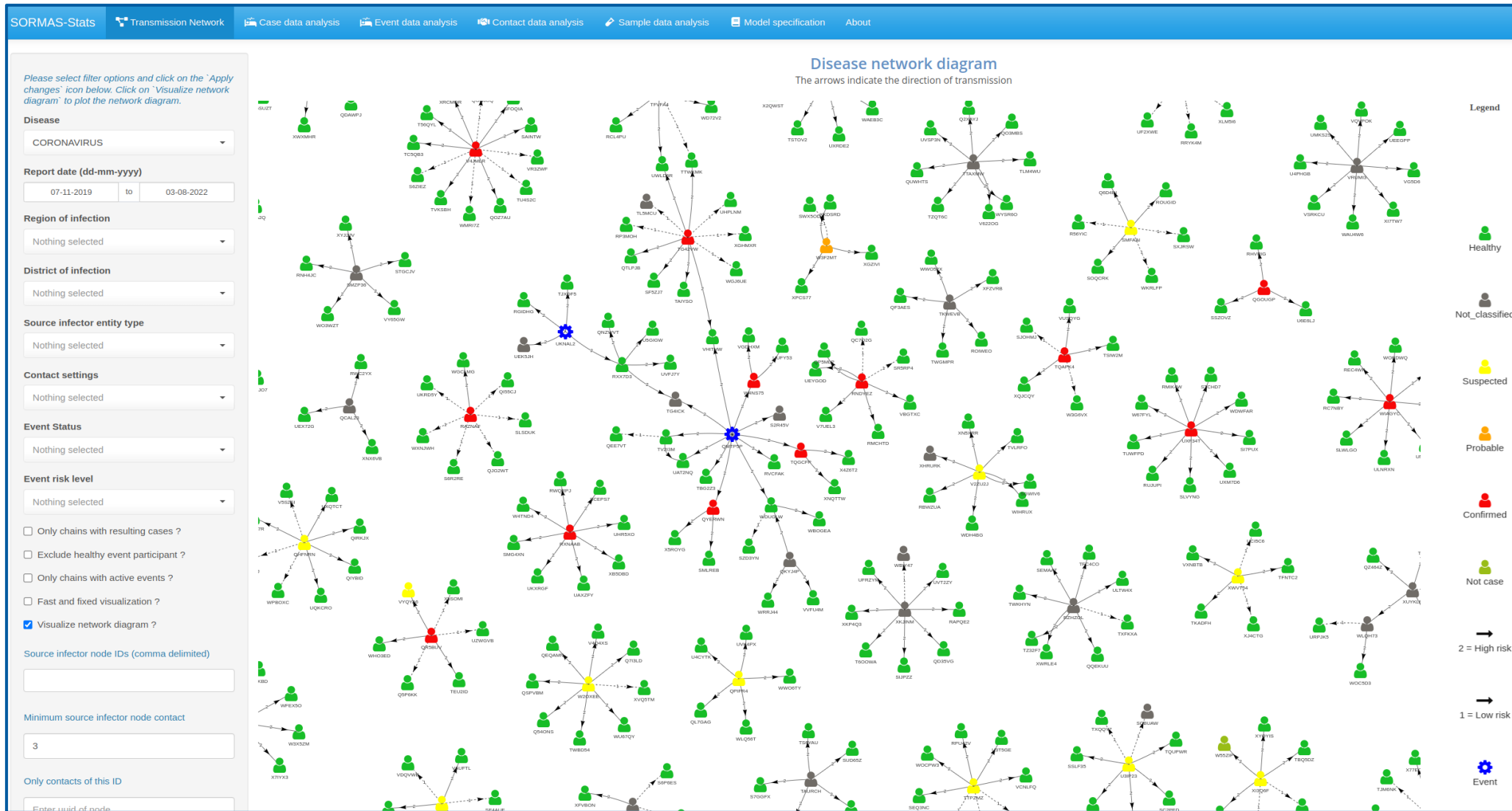




# Modular structure with disease-specific algorithms



# Infection chains visualization

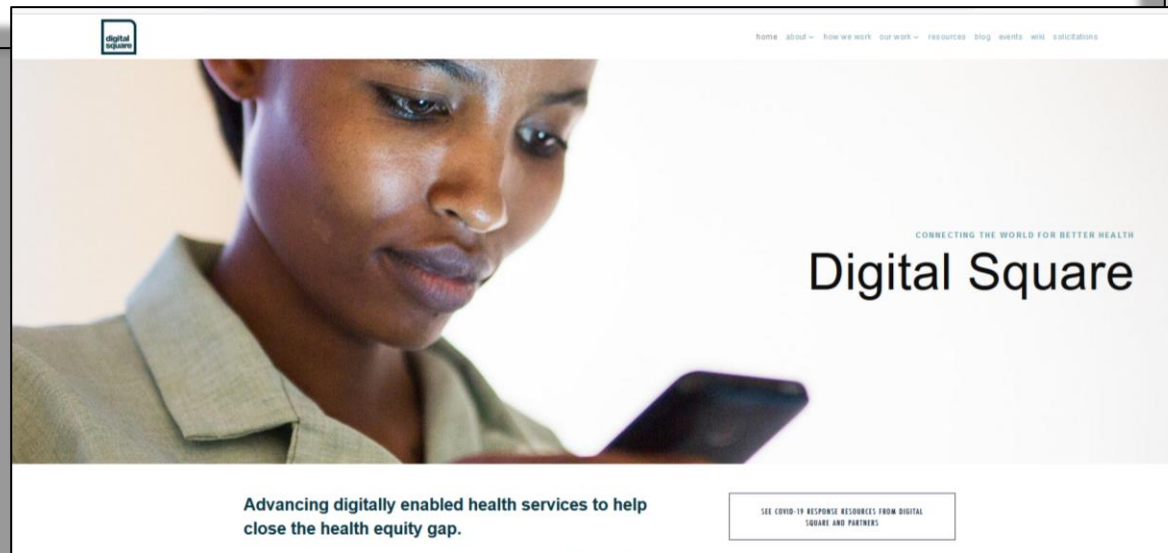


# Benchmarking

- SORMAS, first tool worldwide to fulfill the **Digital Health Global Goods** Maturity Assessment (Digital Square 2019)
- SORMAS selected as one of **9 digital systems for COVID-19** (Johns Hopkins University 2020)
- SORMAS selected as one **3 digital surveillance systems for Africa** (US CDC 2020)
- 3 tools repeatedly in **top selection in multiple systematic reviews** (Silenou et al 2021, Yavlinky et al 2020, Tom-Aba et al 2018)

## Digital Solutions for COVID-19 Response

*An assessment of digital tools for rapid scale-up for case management and contact tracing*



digital square

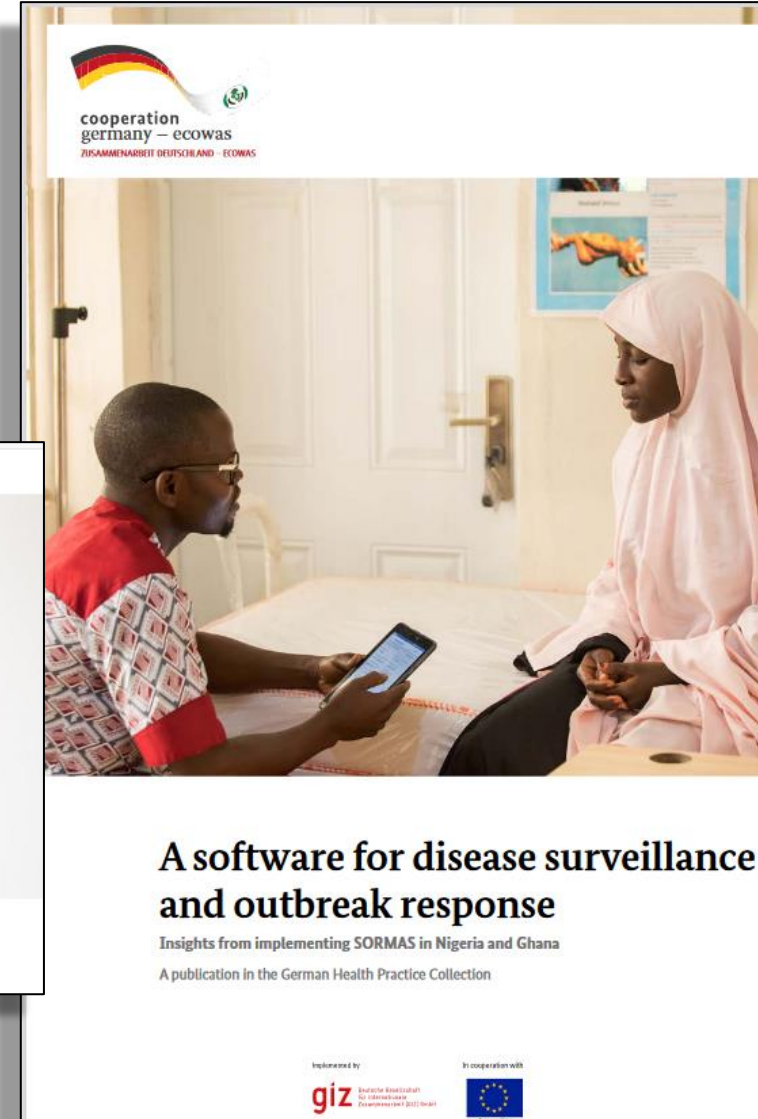
home about how we work our work resources blog events who we collaborate with

CONNECTING THE WORLD FOR BETTER HEALTH

## Digital Square

Advancing digitally enabled health services to help close the health equity gap.

SEE COVID-19 RESPONSE RESOURCES FROM DIGITAL SQUARE AND PARTNERS



cooperation  
germany – ecowas  
ZUSAMMENARBEIT DEUTSCHLAND - ECOWAS



A software for disease surveillance and outbreak response

Insights from implementing SORMAS in Nigeria and Ghana

A publication in the German Health Practice Collection

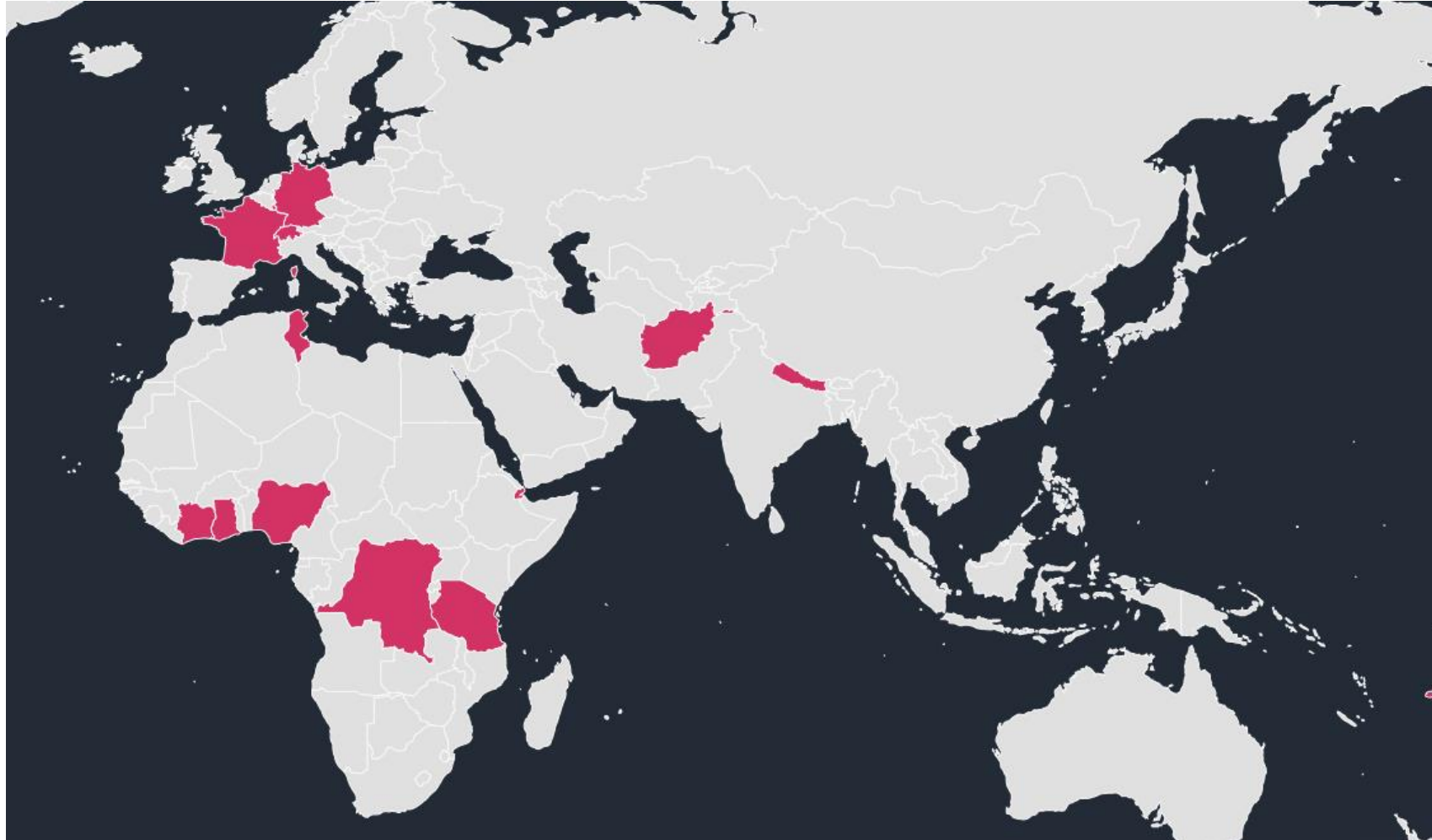
Implemented by giz

In cooperation with





# SORMAS used in over 10 countries worldwide



- Afghanistan
- Democratic Republic of Congo
- Djibouti
- Fiji
- France
- Germany
- Ghana
- Ivory Coast
- Nepal
- Nigeria
- Switzerland
- Tanzania
- Tunisia
- Luxemburg

**In preparation**  
ECOWAS Region  
IGAD Region

# SORMAS demo: [www.sormas.org](http://www.sormas.org)



HOME

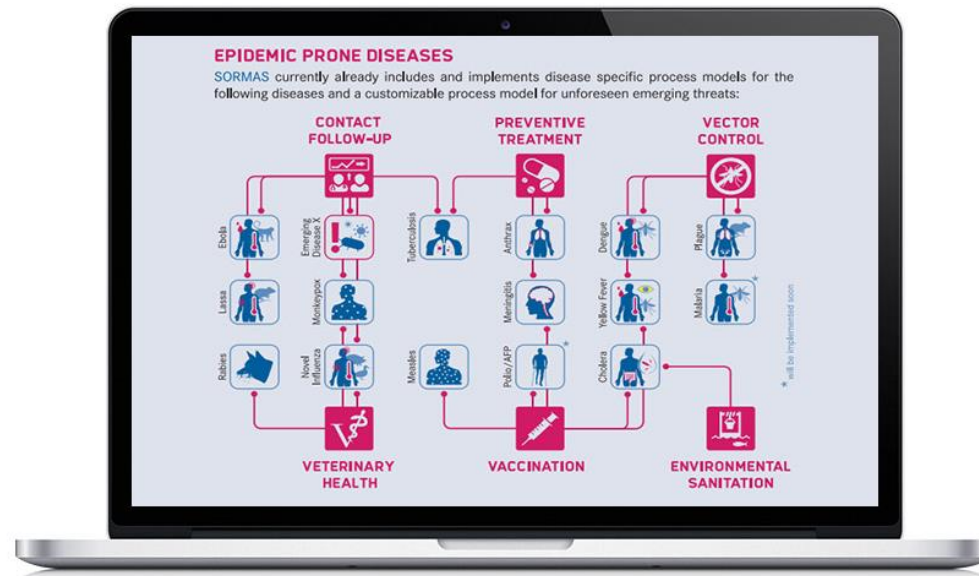
FOUNDATION ▾

SORMAS ▾

PROJECTS ▾

ACADEMY ▾

START DEMOVERSION



**SORMAS.** The real-time software for outbreak and epidemic surveillance. **We're all about fighting epidemics.**

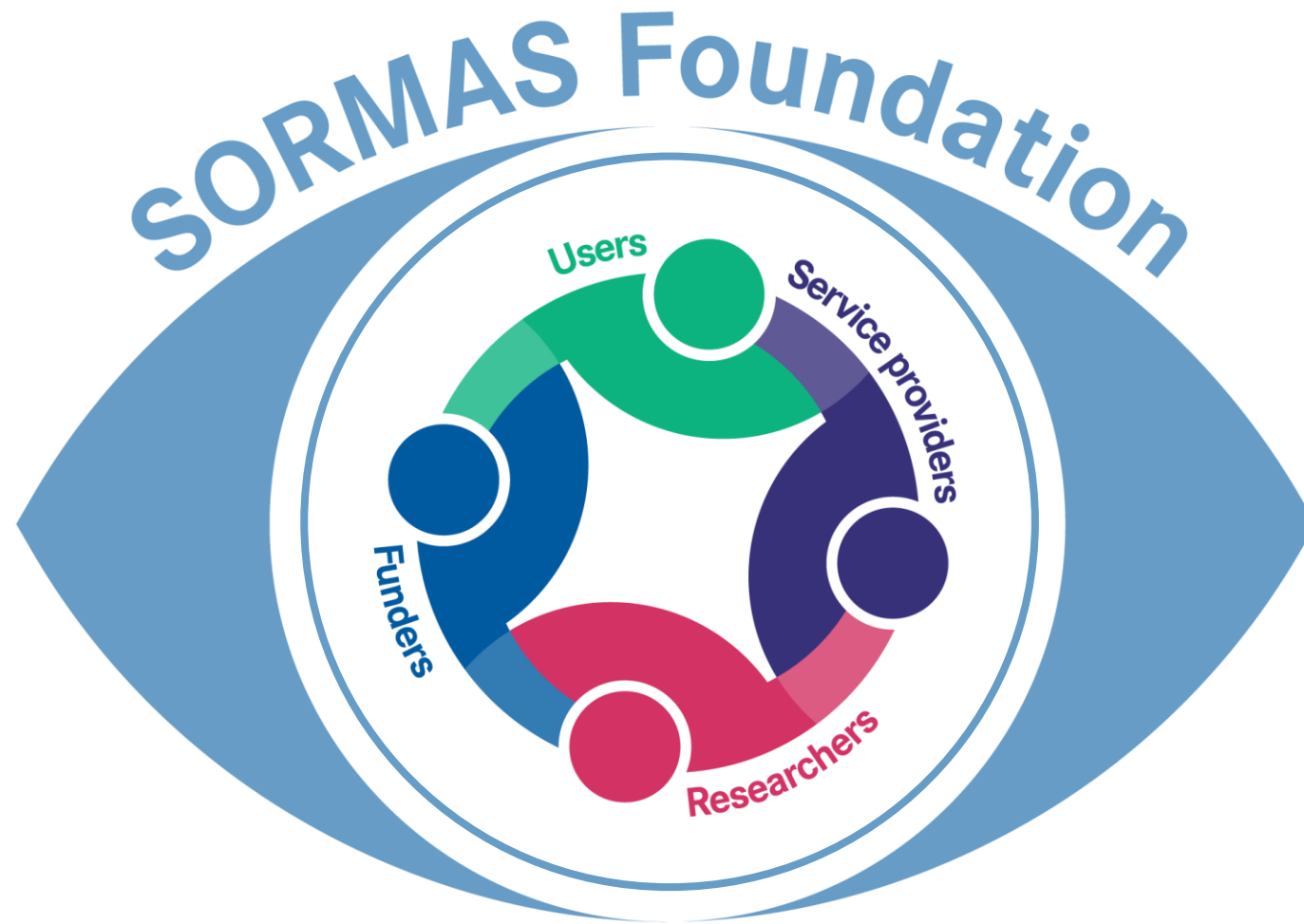
# SORMAS Foundation

# The SORMAS Foundation

## Value proposition

We support local, national and international organisations in the development and implementation of SORMAS and other digital open-source systems for disease prevention and control.

# SORMAS ecosystem



# Areas of work



## Software curation

- Moderation and quality assurance of contributions
- Definition Roadmap



## SORMAS Academy

- Training of personnel at the health departments
- Accreditation service providers



## Support

- Needs assessment
- Follow-up and advice during implementation



## Community Building

- Facilitation of the Community of Practice (CoP) exchange
- Community engagement (e.g. conferences, hackathons, user forums)

# ITK Engineering

# ITK ENGINEERING



**Dr. Frank Schmidt**  
CEO



**Jens Hofmann**  
CFO

 **1994**  
Year of establishment

**100%**   
Subsidiary of Robert  
Bosch GmbH since 2017



**10** **Offices in Germany**   
Ruelzheim | Berlin | Holzkirchen |  
Ingolstadt | Stuttgart | Frankfurt | Lollar |  
Cologne | Braunschweig | Friedrichshafen

**5** **International offices**   
Barcelona | Detroit | Wuxi | Tokyo | Vienna

**>25 years**   
of experience in custom  
systems and computer  
engineering in multiple  
industries





# FROM INCEPTION TO PRODUCT CERTIFICATIONS



# ITK ENGINEERING

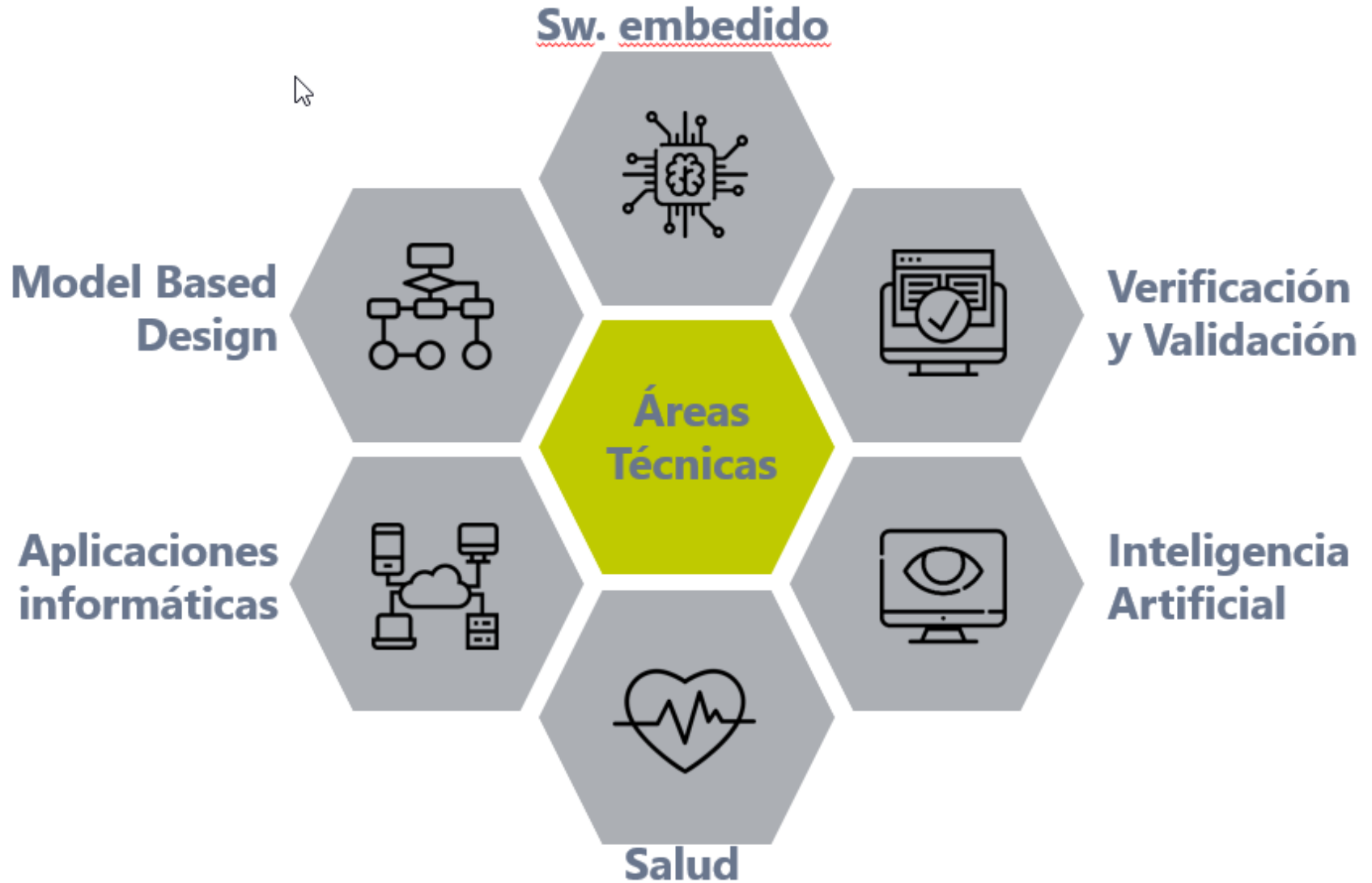
## ENGINEERING CENTER IN BARCELONA



Opens in 2012



Currently 60 employees



# Proposal for RaDAR

# Addressing RaDAR's needs



## Rapid & Accurate Detection

1

Identification of the microorganism, genotype and/or resistance phenotype

2

Where to incorporate the solution?  
*Point of Care / Laboratory / Primary Care*

3

Easy to incorporate into the routines of professionals  
*PoC: confirmation and control by central laboratories - Network system*



## Smart AMR Management

1

Transfer detection results to the right people in 'real time' in a way that elicits a prompt and informed response

2

Be integrated within the organisations' clinical and AMR management workflow, and interface with existing IT systems

3

Facilitate decision making - Improve management  
*Clinicians / Infection control teams  
Microbiology labs*



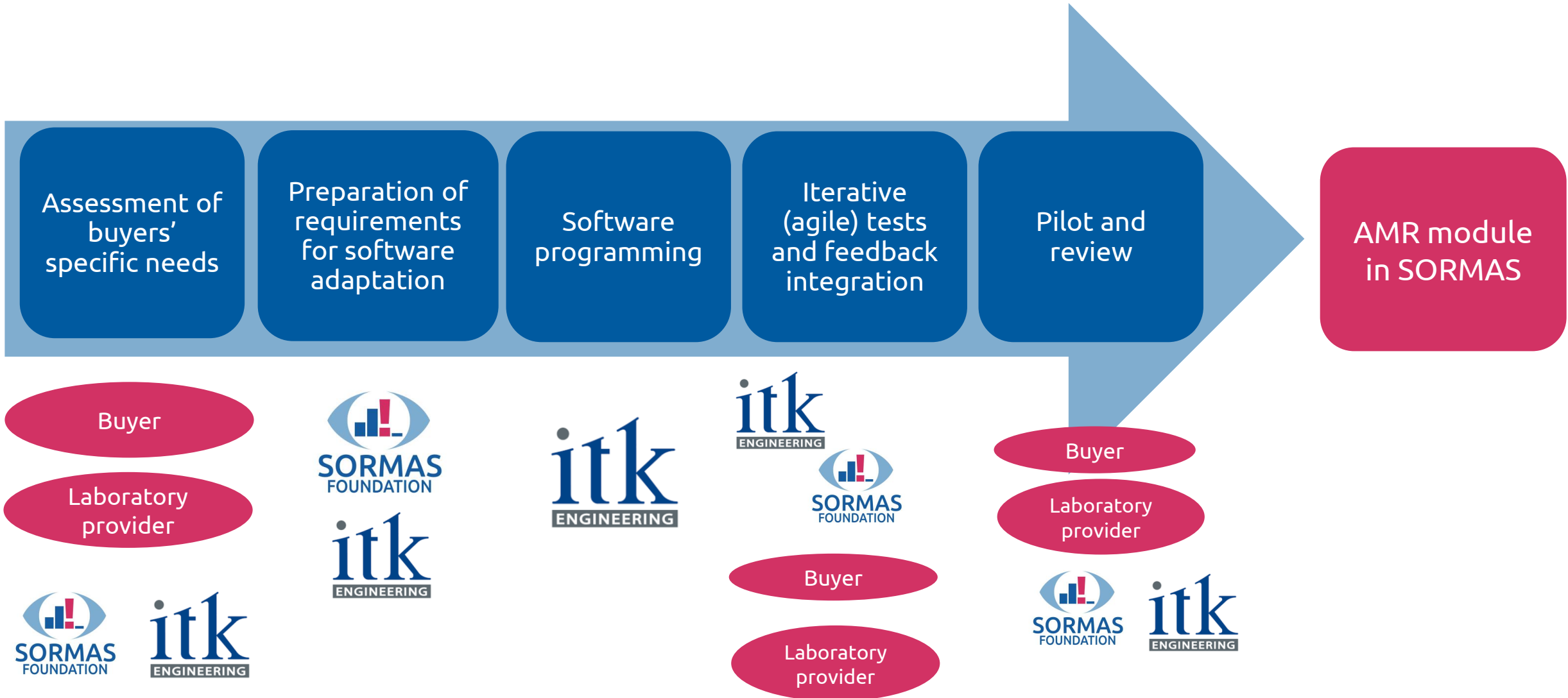
*An integrated solution*

# Smart AMR Management & SORMAS

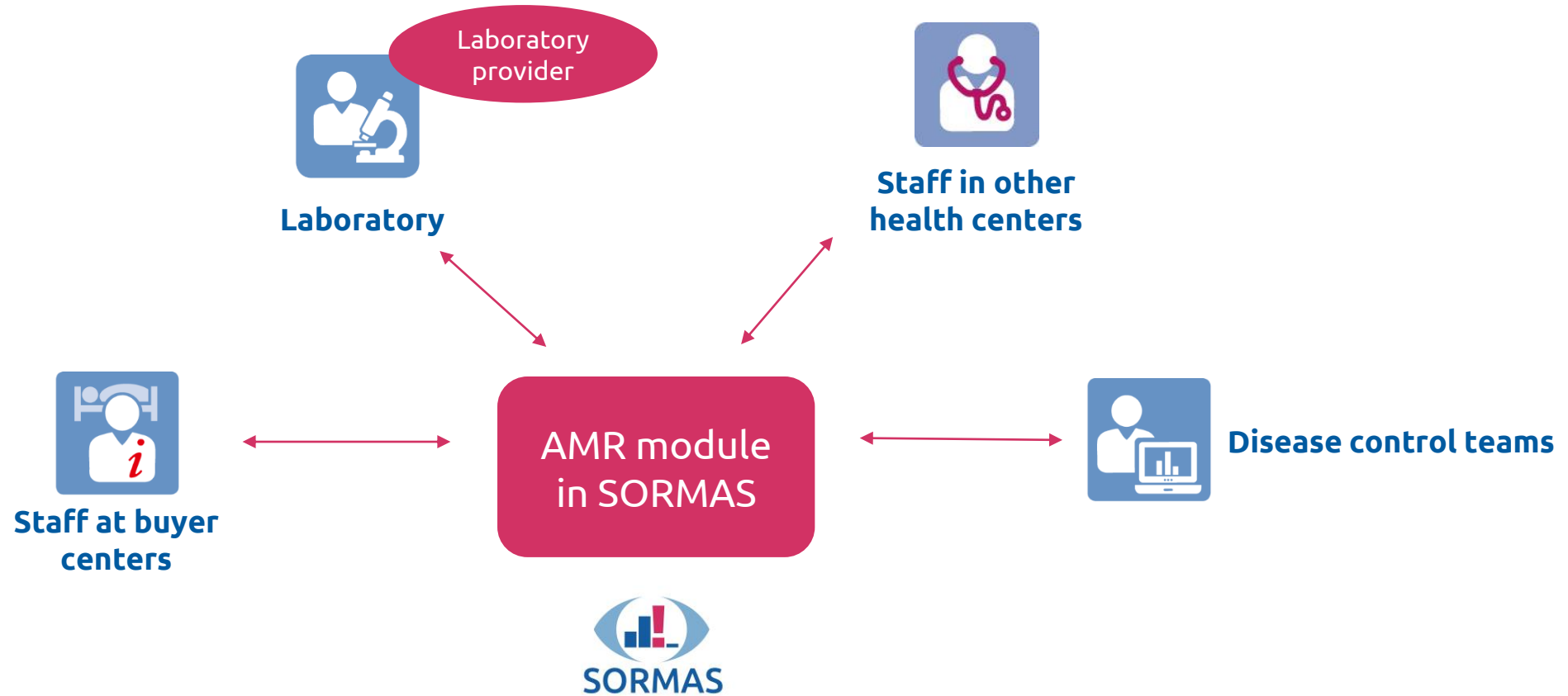
	Requirements	In SORMAS already available
1	Transfer detection results to the right people in 'real time' in a way that elicits a prompt and informed response	<ul style="list-style-type: none"><li>• Real-time data transfer</li><li>• User-based access to the platform</li></ul>
2	Be integrated within the organizations' clinical and AMR management workflow, and interface with existing IT systems	<ul style="list-style-type: none"><li>• Integrated and accessible information in a single system</li><li>• Task-manager that allows assignment of tasks between users</li><li>• Interconnectivity with other IT systems (e.g. via API)</li></ul>
3	Facilitate decision making - Improve management Clinicians / Infection control teams Microbiology labs	<ul style="list-style-type: none"><li>• Results visualization (dashboard)</li><li>• Analysis of the information obtained (statistics)</li></ul>

AMR module  
in SORMAS

# Adaptation of SORMAS to RaDAR's needs



# AMR module in SORMAS



# Contact

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