

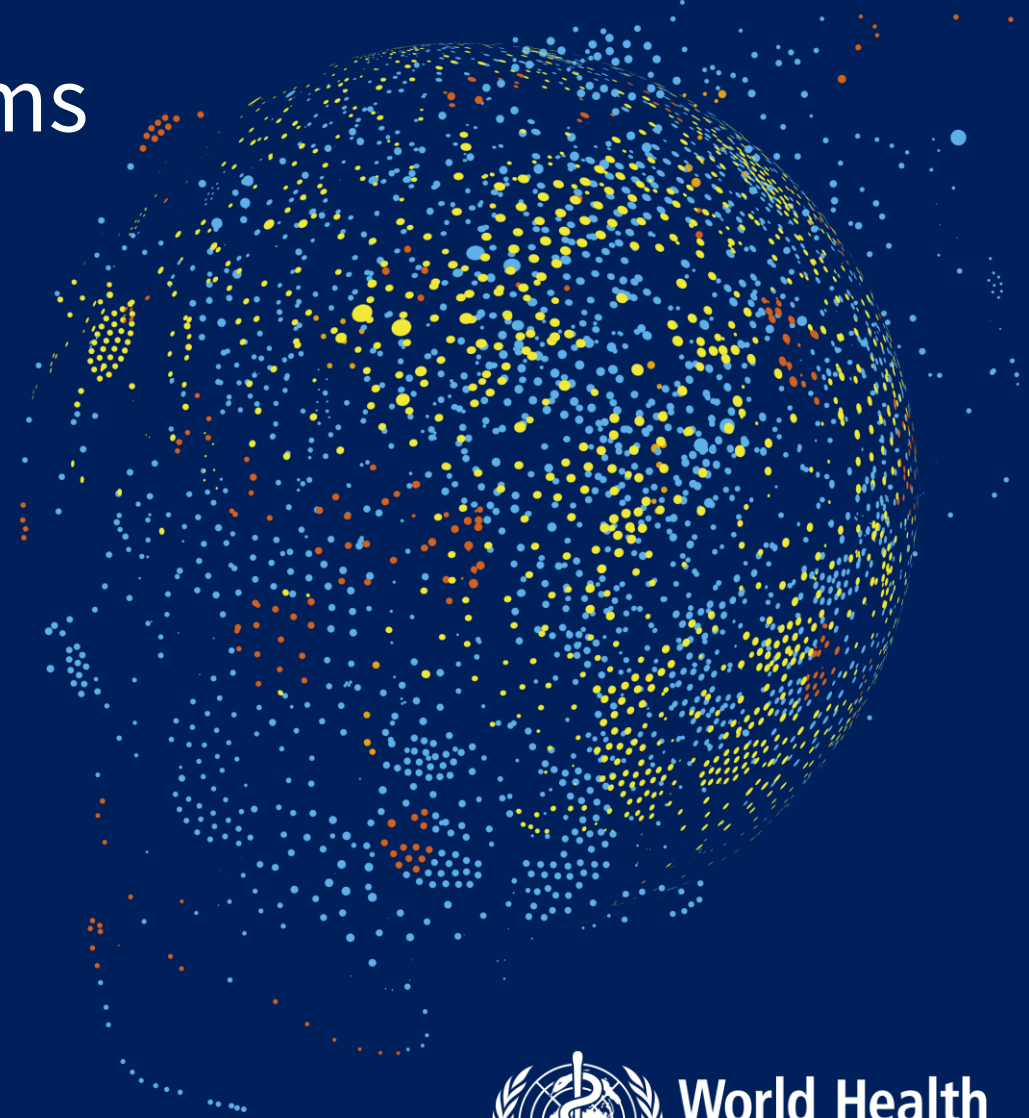
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# Division of Health Emergency Intelligence and Surveillance Systems (WSE)

## Progress after 2 years

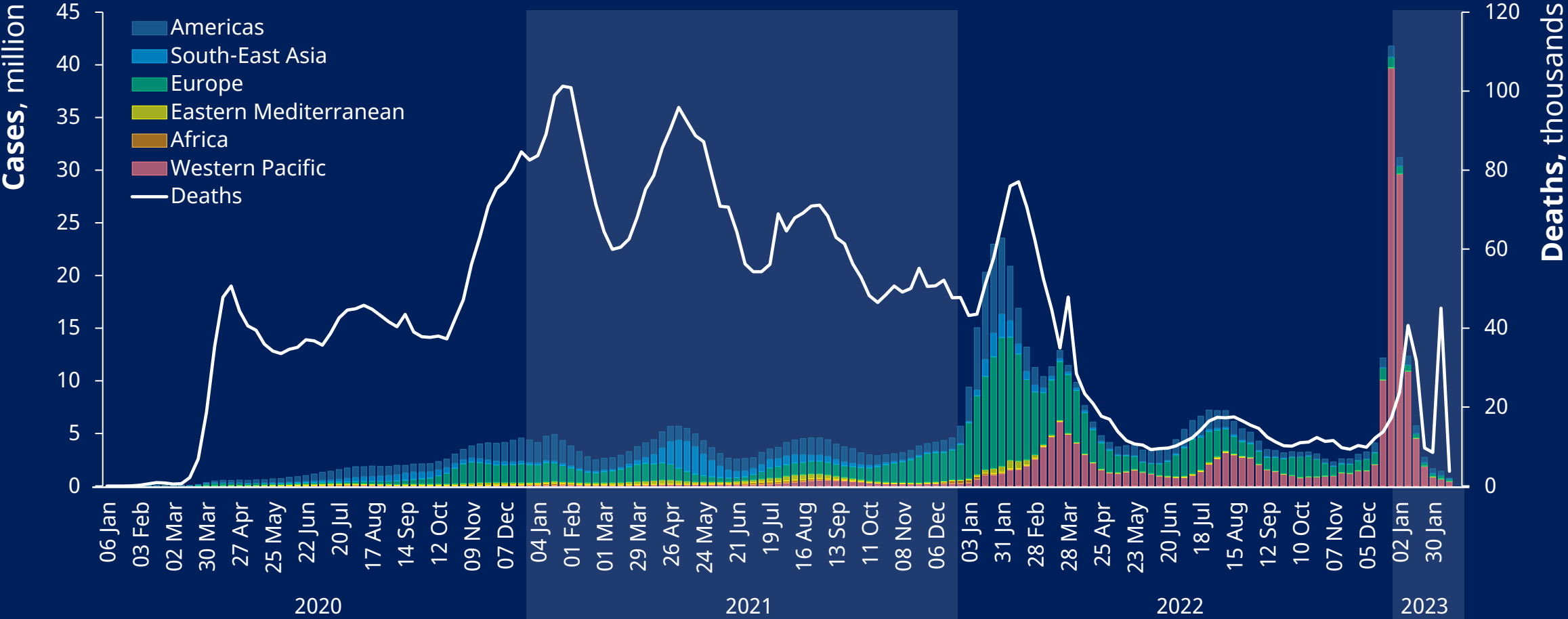
Member State Information Session on Health  
Emergencies Update

15 December 2023



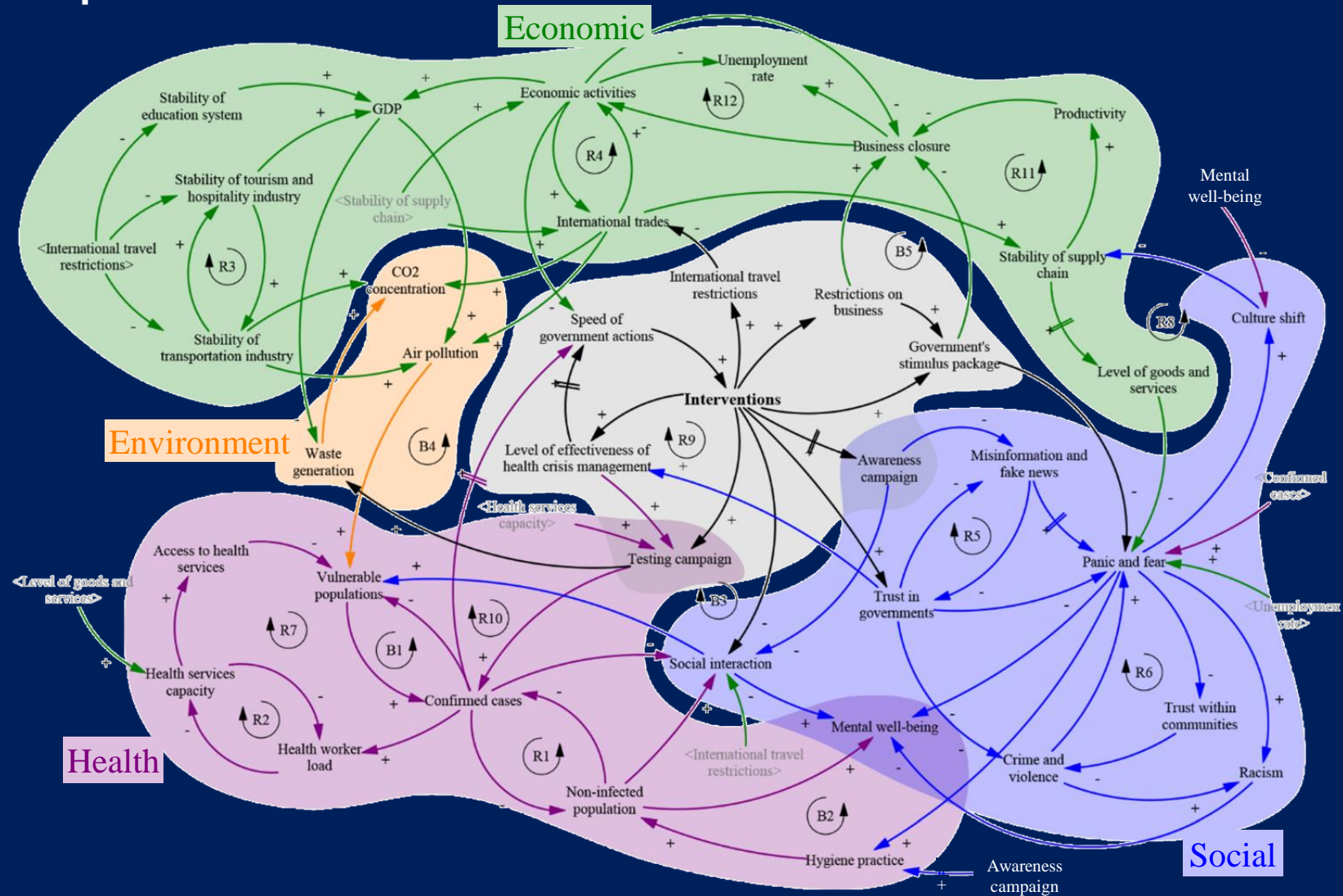
**World Health  
Organization**

# How COVID-19 surveillance data is presented



Source: COVID-19 Weekly Epidemiological Update; Data retrieved 11 Feb 2023. Minor deviation from online dashboard due to different data starting point.

# COVID-19 as experienced



# Decisions faced during emergencies



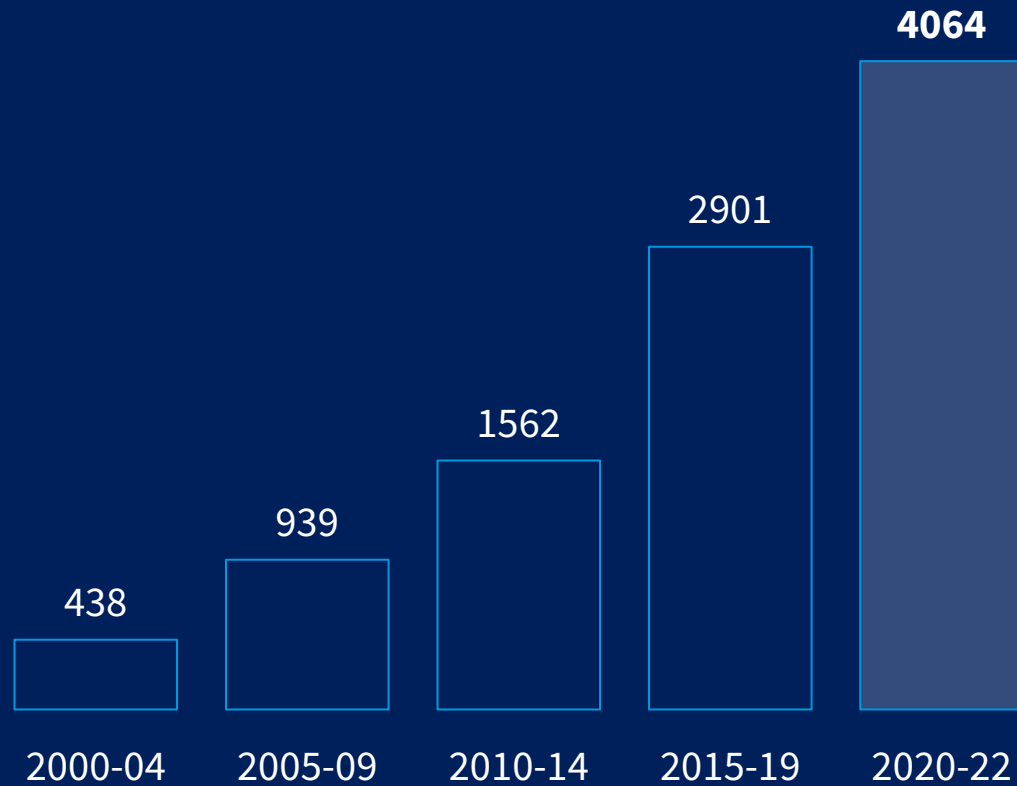
No single surveillance system able to respond to all the information needs of decision makers

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Are our surveillance and epidemic  
intelligence capabilities ready?

# Growing trend of innovative activities in public health intelligence

Research on methods, technologies, tools in surveillance and epidemic intelligence  
2000-22, PubMed



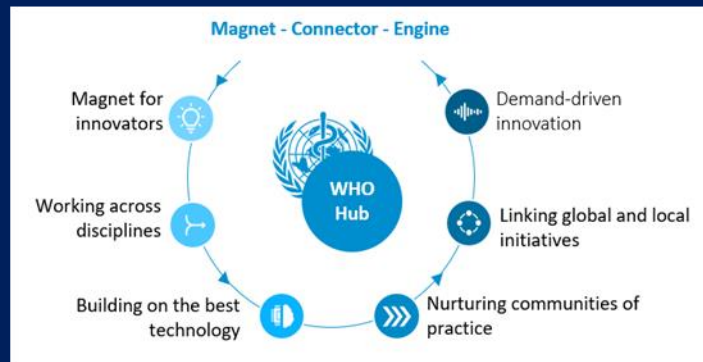
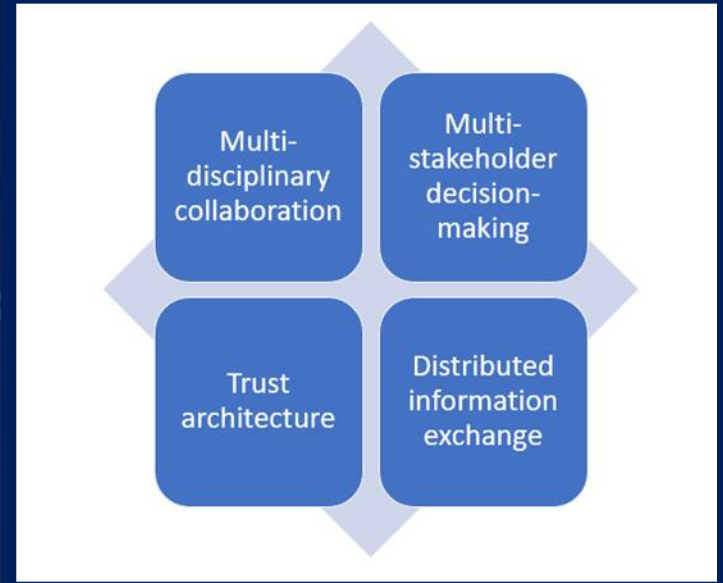
230,000+ Github repositories on COVID-19  
Jan 2020 – Feb 2023





# Forming the new Division

September 2021



# Evolution of the WHO Health Emergencies Programme

## WHO Health Emergencies Programme

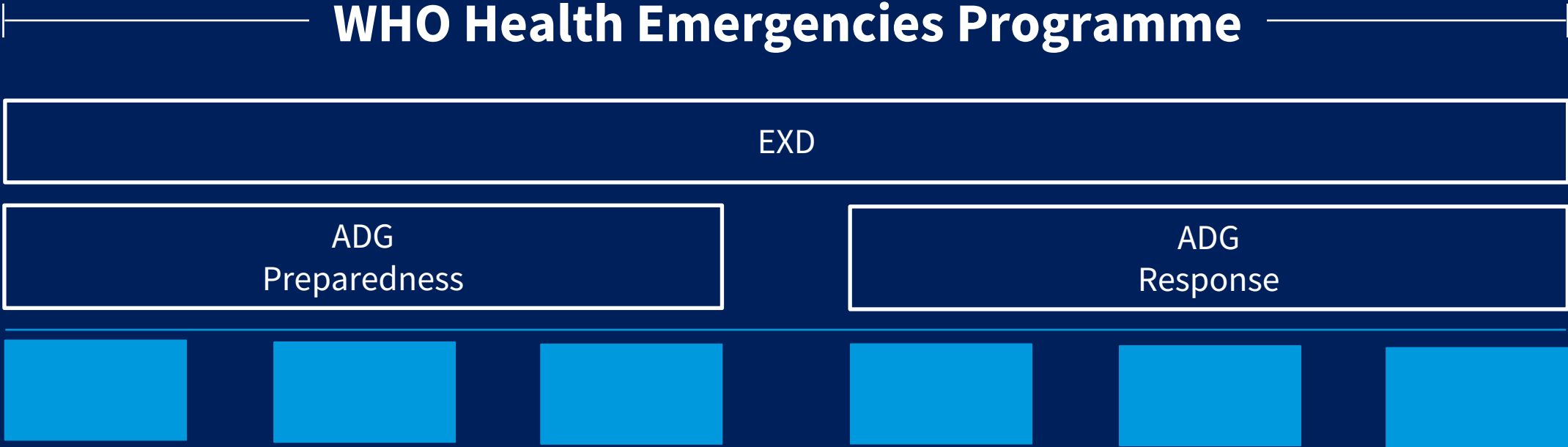
EXD

D/EXD

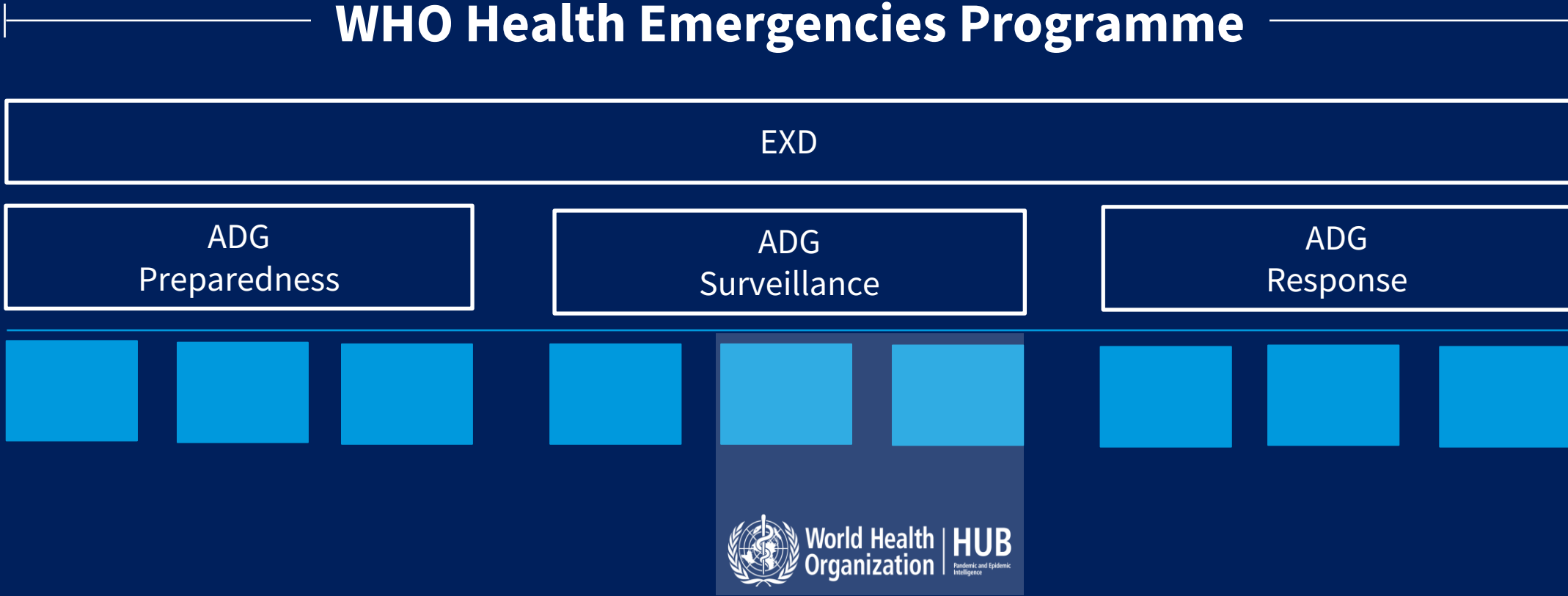




# Evolution of the WHO Health Emergencies Programme

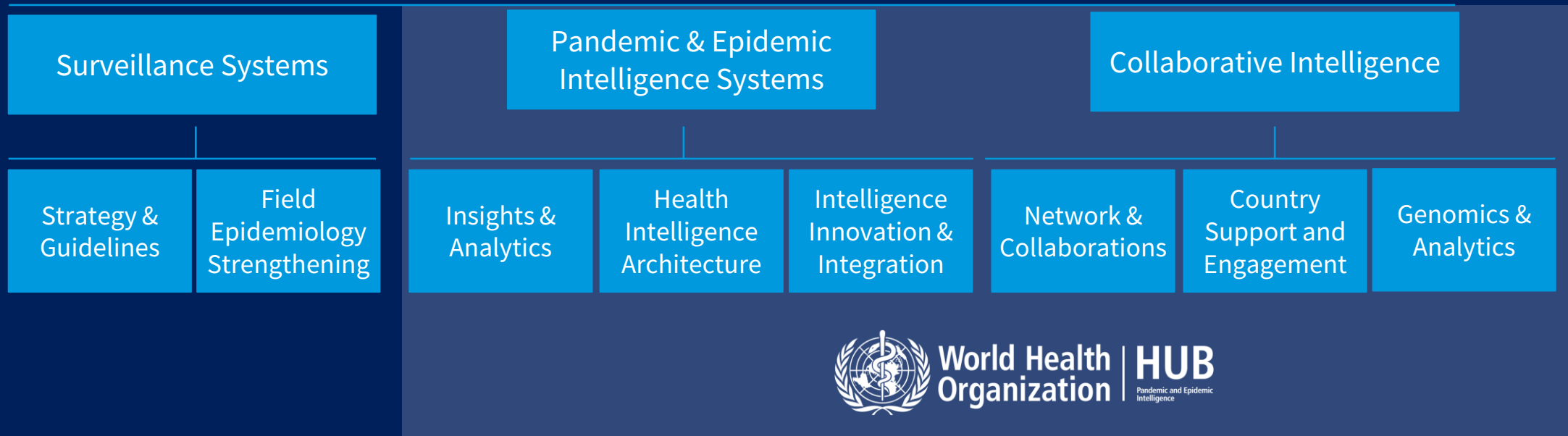


# Evolution of the WHO Health Emergencies Programme

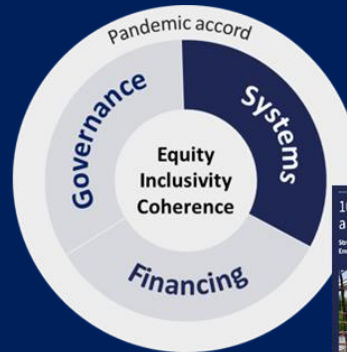


# WHO Health Emergencies Programme

## Intelligence & Surveillance Systems (WSE)



# WSE formed concurrent to a rapidly changing landscape



## IHR revision, INB WHO CA+ & other instruments

## National Investment Plans & Financing for sustainable PPR (FIF +++)

- Surveillance
- Lab
- Workforce

## Health Emergency Preparedness, Response & Resilience (HEPR) Framework

# WSE's strategy: Collaborative Surveillance part of HEPR framework

300+ recommendations from COVID-19 and recent major emergencies

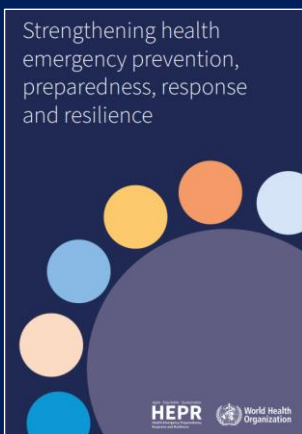


## Collaborative surveillance

The systematic strengthening of capacity and collaboration among diverse stakeholders, both within and beyond the health sector, with the ultimate goal of enhancing public health intelligence and improving evidence for decision making

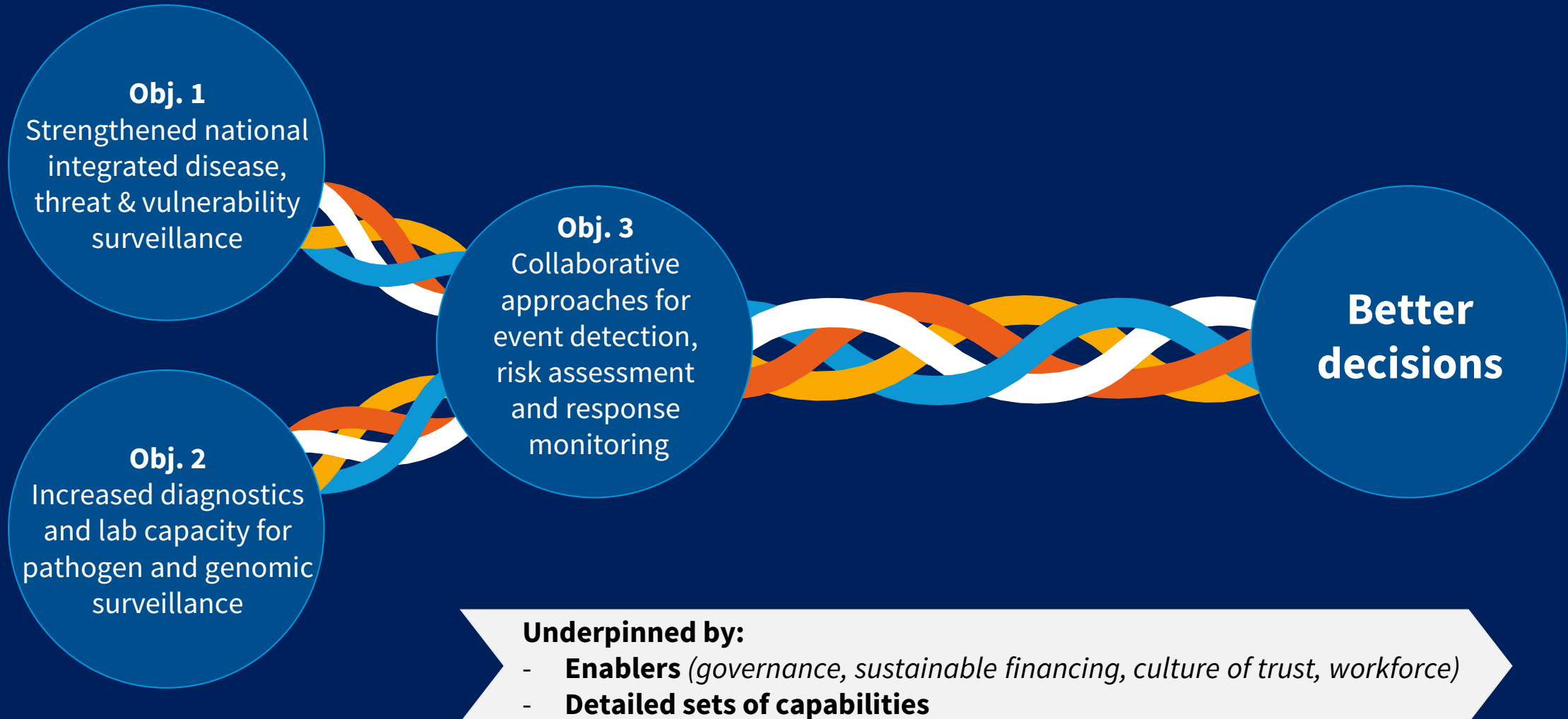


5 interconnected components

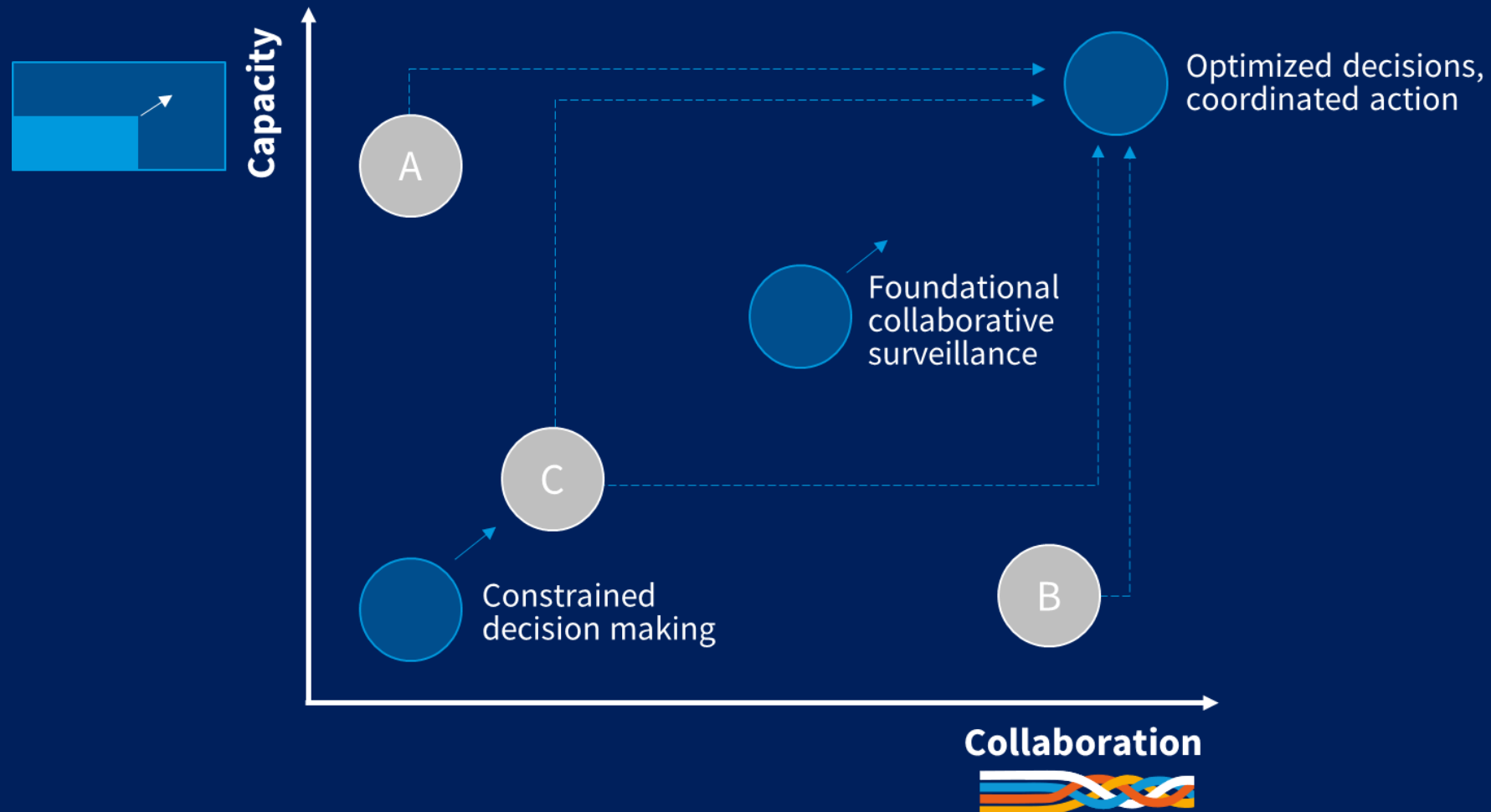




# Development of capabilities for Collaborative Surveillance



# Focusing on collaboration in addition to capabilities for Collaborative Surveillance



# A strategic framework to deliver

## Vision

A world where **collaborative surveillance empowers countries and communities** to minimise the **impacts of pandemic and epidemic threats**

## Mission

We catalyse **transformation** in collaborative surveillance **across all levels and serve countries** by **connecting, innovating, and strengthening** capabilities to produce **better data, analytics, and decisions**

## Roles



### Connect

- » **Radically improve collaboration**, trust in data sharing, and cocreation within surveillance systems
- » **Drive global agreement** on priorities for research, funding, and action
- » **Catalyse new solutions** through communities of practice



### Innovate

- » **Incubate cutting-edge initiatives** that drive step changes in surveillance outcomes
- » **Transform academic research** into pioneering new tools and approaches that fit country and regional contexts



### Strengthen

- » **Shape surveillance workforce** of the future and coordinate capacity building to realise it
- » **Empower countries** to plan & mobilise resources to drive down inequality in surveillance capacity
- » **Create a living repository** of global standards for surveillance data and procedures

# WSE has mapped its portfolio to its 3 core strategic objectives

WSE Management and Operations

## WSE Objectives

## WSE Strategic initiatives

1. Actors aligned	1.1 Set global priorities
	1.2 Mobilize political, financial, and technical support
2. Effective solutions introduced and adapted	2.1 Improve the analysis and sharing of intelligence by catalysing tools and incentives
	2.2 Enhance decision making through the integration of information by innovative approaches
3. Successful solutions scaled up	3.1. Modernize and develop global standards
	3.2. Develop instruments and provide guidance to tailor and modernize surveillance systems
	3.3. Support countries to develop field epidemiology capacity

## WSE Initiatives as mapped against the strategic initiatives

EIOS	IPSN	CS Implementation	Research prioritization	Speaker Series	NPHA	Innovation Forum
		RKI PHI	Data Science for PHI	Collaboratory	HSPA	KR2
Decision Support Simulator		OSPO	IOA		RKI AMR	
EWAR	HSPA	CS Implementation	Surv. Data Standards	Contact Tracing Guidance	Risk Analysis Package for MS	
EIOS (Techn.)			Collaboratory	RKI IGS		
COHFE	Surv. Data Standards	GFEP	PHI Competencies	RKI GOARN		





# 1. Working with Member States to strengthen NPHAs



First National Public Health Agency Consultation (March 2023)



Strengthening Emergency Preparedness and Response through National Public Health Agencies Webinar (November 2023)

- Define and deliver on core emergency preparedness and response functions
- Document and disseminate different governance, policy, regulatory and financing structures
- Build networks and facilitate peer-to-peer learning opportunities
- Identify sustainable financing modalities
- Strengthen workforce development including surge capacity
- Develop need-specific tools, such as normative guidance on quality standards for new tools, systems and other innovations

# 2. Scaling Epidemic Intelligence from Open Sources (EIOS)



A GLOBAL INITIATIVE LED BY THE WORLD HEALTH ORGANIZATION



The screenshot displays the EIOS monitoring interface. At the top, it shows navigation tabs for Monitoring, Documents, Dashboards, Training, Communities and Teams, and Help and Feedback. The main content area is divided into several sections:

- Board:** "All Items - Last 14 days" with 566k total articles. Includes search and filter options.
- Map:** A world map with orange heatmaps and black location markers indicating data points across various countries.
- Time Period:** A line chart showing activity over time from February 12 to 26, 2023. Below it is a long-term view from 2018 to 2023.
- Categories:** A section for filtering by WHO categories.
- Mentioned Geographical Areas:** A section for filtering by specific locations.
- Articles List:** A table of "Latest live posts" with columns for source, title, category, and location. Examples include "Cyber Attack" from theherald-au, "Repleated banking secrecy would shake putin's inner circle" from reafid, and "Gisborne under heavy rain warning, North Island set for thunderstorms" from Stuff.



Snapshot of EIOS System

# 3. Developing the International Pathogen Surveillance Network



**Vision:** Every country has equitable access to sustained capacity for genomic sequencing and analytics as part of its public health surveillance system

**Mission:** Create a mutually supportive global network of genomic surveillance actors that amplifies and accelerates the work of its members to improve access and equity

## What is IPSN?

A network of pathogen genomic actors (human and animal health), including:

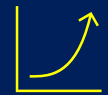
- ✓ National and international lab networks & disease programs
- ✓ Public and veterinary health systems
- ✓ Academic groups
- ✓ Private sector
- ✓ Philanthropy & civil society
- ✓ International standard organizations
- ✓ Platform providers



## What does IPSN do?



Communities of practice to solve common challenges



Country scale-up accelerator to align efforts & enable South-South exchange



Grant funding to enable equity and power IPSN projects



High-level advocacy & comms to keep PGS on the agenda



Global partner forum for genomic surveillance

## What will IPSN deliver?

Increased harmonization and innovation in pathogen genomics

Increased scale and efficiency of country capacity building efforts

Increased political attention and financing efficiency



**Stronger national and international surveillance system better able to detect and characterize new threats and reduce endemic burdens**

# 4. Developing the Global Field Epidemiology Partnership

*A network of national, regional and global health partners to actively champion the development of operational epidemiology capacities, professionalise this workforce, and strengthen relevant institutions*



Launch of GFEP (18 October 2023)





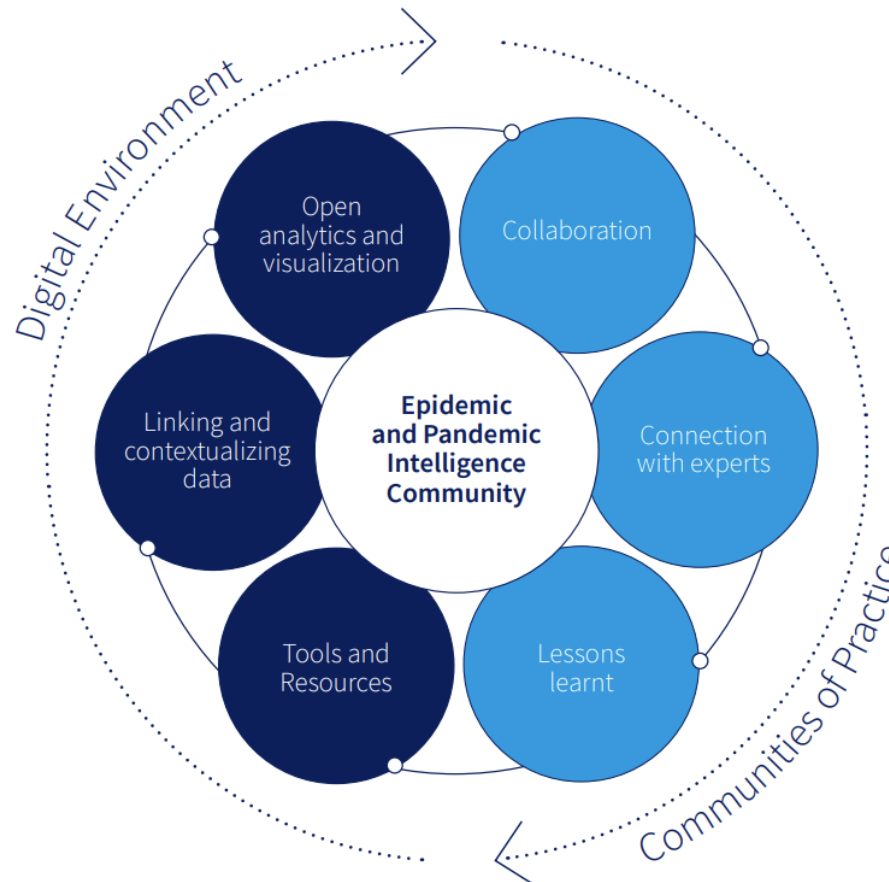
# 5. A new Collaboratory

A world where interconnected pandemic and epidemic intelligence communities collaboratively and rapidly respond with enhanced data, better analysis and actionable insights

## Digital Environment

Building a digital environment facilitating exchange of data, analysis, and insights

- Enable collaboration on tools and analysis
- Linking and finding data and insights
- Provide library for tools and resources
- Access to analytic platform



## Community

Using the convening power of WHO to connect, build and strengthen communities

- Enhance and strengthen collaboration
- Enable connection and exchange between experts
- Share information and lessons learned
- Co-create analysis and tools



# 6. A Pandemic Simulator

## Vision statement

Enable better and more equitable health emergency policy outcomes with novel, transparent, best-in-class digital decision aids

## Solution elements

Key value-added solutions from the user perspective – providing and enabling next-generation:



Novel ability to simulate **compounding impact of multiple interventions**



Flexible exploration of **'what if' scenarios** through completely customizable pathogen characteristics



**Equitable access to simulation capabilities** across geographies, user types and experience levels



**Simplified, rapid translation of epidemic insight into the policymaking process**



Shared modeling and data baseline as well as visualization tool to enable **collaborative standardized approach** and language to pandemic and epidemic simulation

ILLUSTRATIVE



PDS Pandemic Decision Simulator



### Solutions that bring impact

PDS tool support technical experts as well as public health experts and governmental policy makers by aiding their decision-making in pandemic situations.



Understanding of realistic scenarios



Evidence-based intervention planning



Data-driven trade-offs

# Socialising the Division, the WHO Hub and Collaborative Surveillance

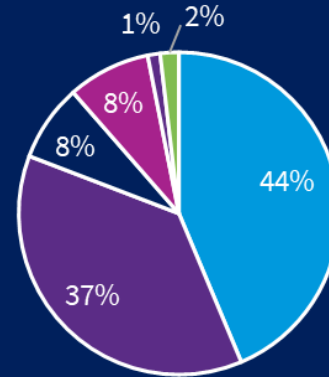
**>380**  
stakeholder  
engagements\*



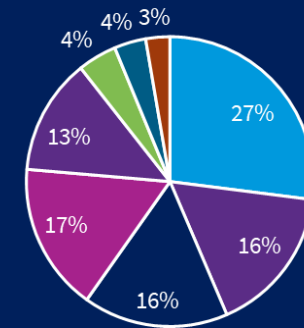
**42** Member  
States



across **6**  
WHO Regions



**191**  
institutions



\*Defined as unique engagements at ADG- and Director-level with institutions. Does not include attendance at conferences or WHO-internal meetings.





# Thank you

