

# **Strengthen Value Creation Capabilities through ICT-based Value Chain for Open Economic Security**

**September 21, 2022**

**Dr. Nobuhiro Endo**

**Executive Advisor, NEC Corporation**

# Open Economic Security by continuous 'Value' creation



**Open Economic Security**



**Enhance Value Contribution to Human Society**

by strengthening our Value Creation Capabilities



Developing and Enhancing  
**Global Value Chain**  
**For High Value solution**  
by Data Free Flow with Trust



084918704981574267018362  
973579452678275703840089  
001011102804532  
13521210281479808  
49084605770045982089  
807840012005054528638  
62710004528085408574  
8598055687564868875490832  
3701332048

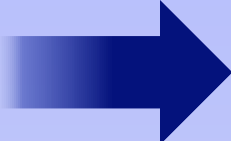
# ICT Evolution leads to 'Data Society'

Information Society  
(Society 4.0)

Data Society  
(Society 5.0)

Values  
created

Partial  
Optimization



Total Optimization

Source of  
Values

Information



Strongly Correlated  
Subset of Data

Wide range & Large  
Volume Data in Real time

Evolution of ICT capabilities (1995~2022)



Computing Power

6.5M<sup>\*1</sup> times



Network Speed

1M<sup>\*2</sup> times

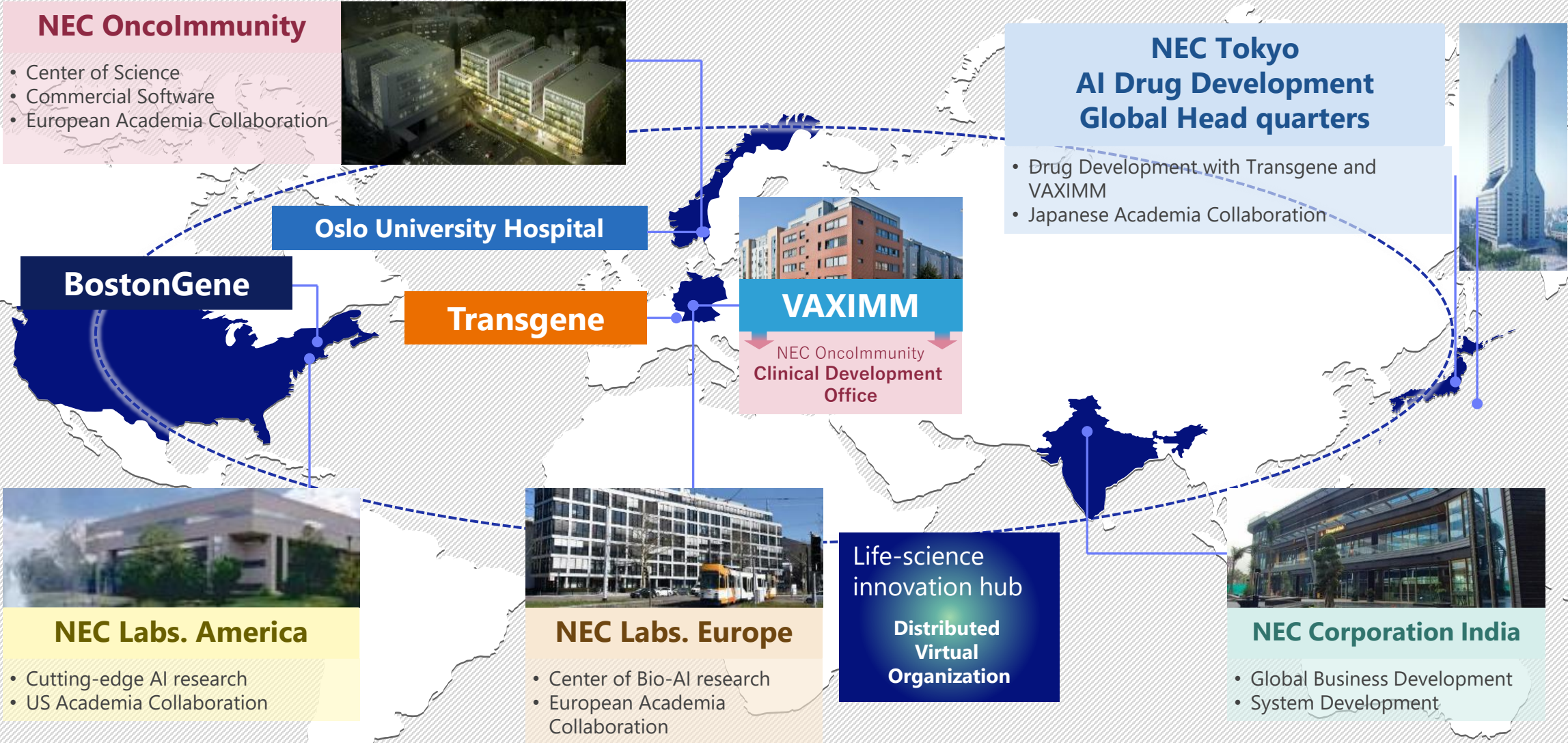
Human society has acquired the ability to collect large amounts of data instantly and process it instantly.

\*1: Comparing of the processing performance of the world's fastest supercomputers in each year

\*2: Comparing 2nd and 5th Generation Transmission Rates in Mobile Communications

(Top500 the List, NTT Docomo)

# AI Drug development



# Pandemic waves

## In 1900s

Flu pandemic happened **3** times

**1918**

Spanish Flu

**1957**

Asian Flu

**1968**

Hong Kong Flu

## Since 2000

**4** pandemics and **1** epidemic happened

**2002**

SARS-CoV

**2012**

MERS-CoV

**2009**

Swine Flu

**2014**

Ebolavirus

**2019**

SARS-CoV-2

CEPI's aspiration  
respond to the  
next Disease X

100 Days

Developing pandemic  
busting vaccines in  
100 days

# Innovation is a game changer - Contribution to global health



CEPI

April 2022

Vaccine  
Development

**Artificial intelligence-designed broadly protective beta-coronavirus vaccine**

**100 Days Mission for vaccine development**

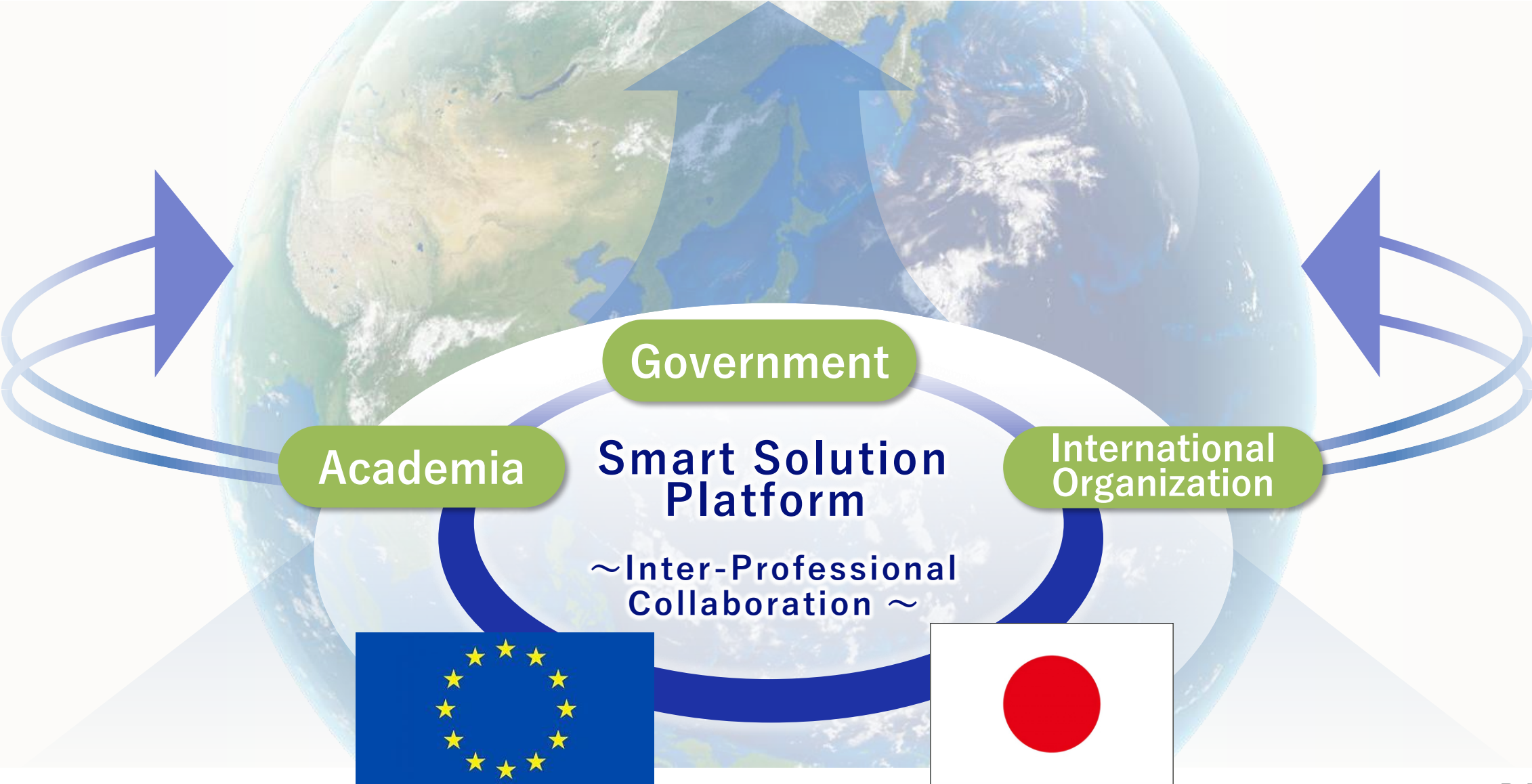
CEPI is an innovative global partnership between public, private, philanthropic, and civil society organisations launched in Davos in 2017 to develop vaccines to stop future epidemics.

CEPI's mission is to accelerate the development of vaccines and other biologic countermeasures against epidemic and pandemic threats so they can be accessible to all people in need.

# Global health action Japan - Value-chain acceleration activity



# Economic Security - Sustainable human society



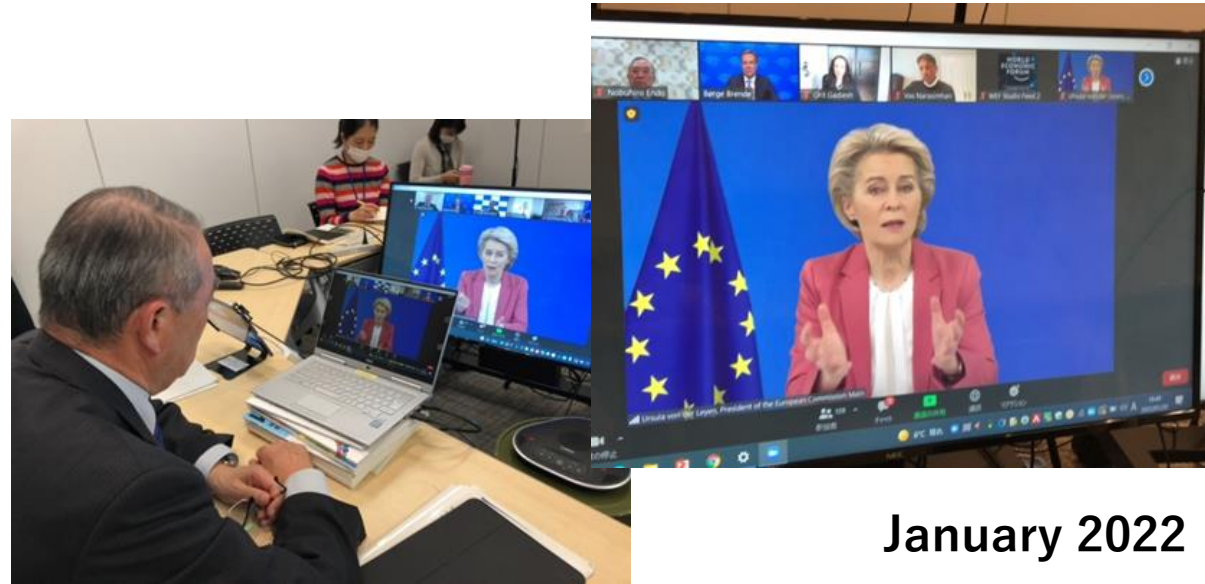


# Close Communication & Connectivity among global leaders will accelerate the Value-chain activity



September 2021

**‘Dialogue with Mr. Breton in Tokyo’  
Semiconductor, DX, supply chain security**



January 2022

**‘Special Dialogue Address and Business Dialogue’  
World Economic Forum  
Social Value Creation through Smart Solution**



May 2022

**‘G7-B7 roundtable’  
Cyber Resilience of Digital Infrastructure**

\ Orchestrating a brighter world

**NEC**