R&D Blueprint for action to prevent epidemics

WHO public consultation for R&D platform technologies

R&D BLUEPRINT

Why an R&D Blueprint?

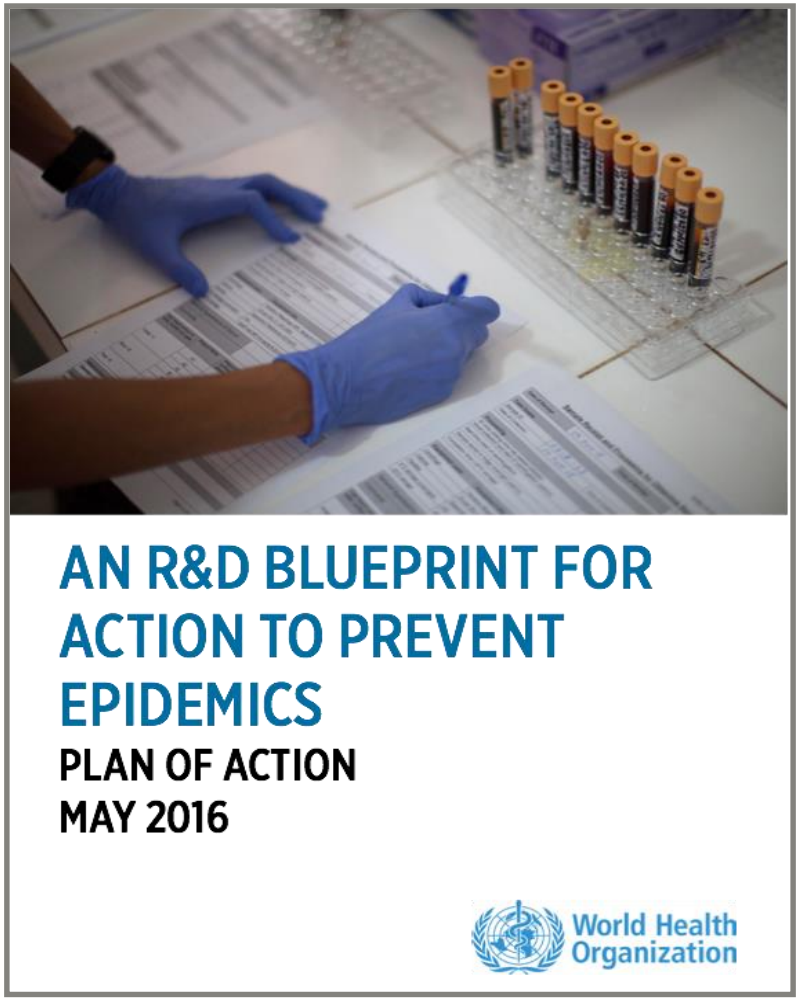
The Ebola epidemic has demonstrated that **it is possible to accelerate R&D during emergencies** and that it is feasible to safely and effectively implement research interventions in an affected country.

It also highlighted the imperative to **advance R&D preparedness** and **effective collaboration frameworks** in advance of any new epidemic.

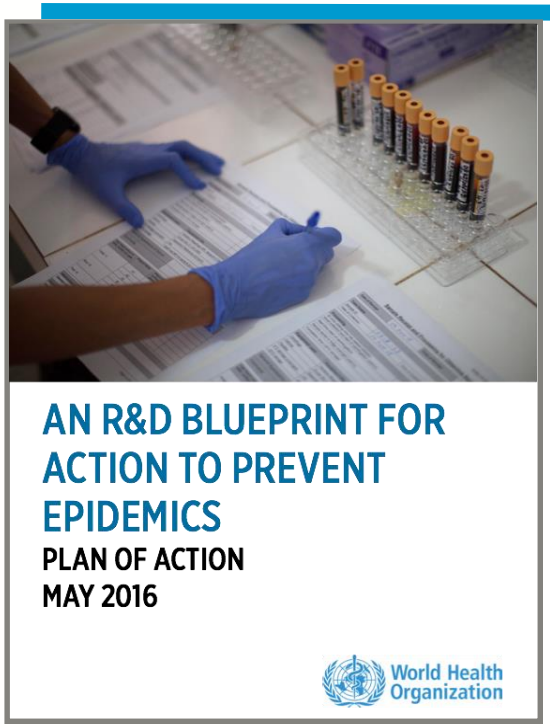
Operational objective of the Blueprint

The R&D Blueprint seeks to create an enabling environment through which all actors, through increased funding, data sharing and partnerships, can drive change in the public health landscape to provide an elevated level of global impact.

What is the Blueprint?



- a global **strategy** and preparedness **plan**
- a **convening mechanism** and an **instrument** to articulate technical guidance



4 principles

1

An inclusive process with a clear mandate and defined milestones

2

Building on the efforts of others in the community

3

A collaborative effort with the Member States in the affected countries at the core of it

4

Driven by scientific knowledge

Three approaches: main recent achievements

A Improving coordination & fostering an enabling environment

- Steps to create the Global Coordination Mechanism

B Accelerating Research & Development processes

- Revised list of prioritized pathogens
- Roadmaps: MERS-CoV, Filovivirus, CCHF etc.
- TPPs for Ebola, Zika, MERS-CoV, Ebola, Lassa, Nipah
- Zika R&D response: EUAL, product pipeline etc.
- **Identification of potential platform technologies**

C Developing new norms and standards adapted to the epidemic context

- Steps to inform discussions on trial designs
- Developing MTA capacity building tool
- ICMJE guidelines for sharing results

Public consultation on R&D platform technologies

October 2015 – July 2016

Objectives: Ideas for platform technology solutions:

- Flexible to develop and manufacture candidate products for clinical trials before any confirmed epidemic threat.

Scope

- Vaccines, therapeutics (drugs and blood products), diagnostics, and enabling technologies;
- Targeted against at least three of the Blueprint priority pathogens.

Access

- Affordability in low and middle income countries;
- Explain how IP issues will be managed;
- Include strategies to assure readiness for production.

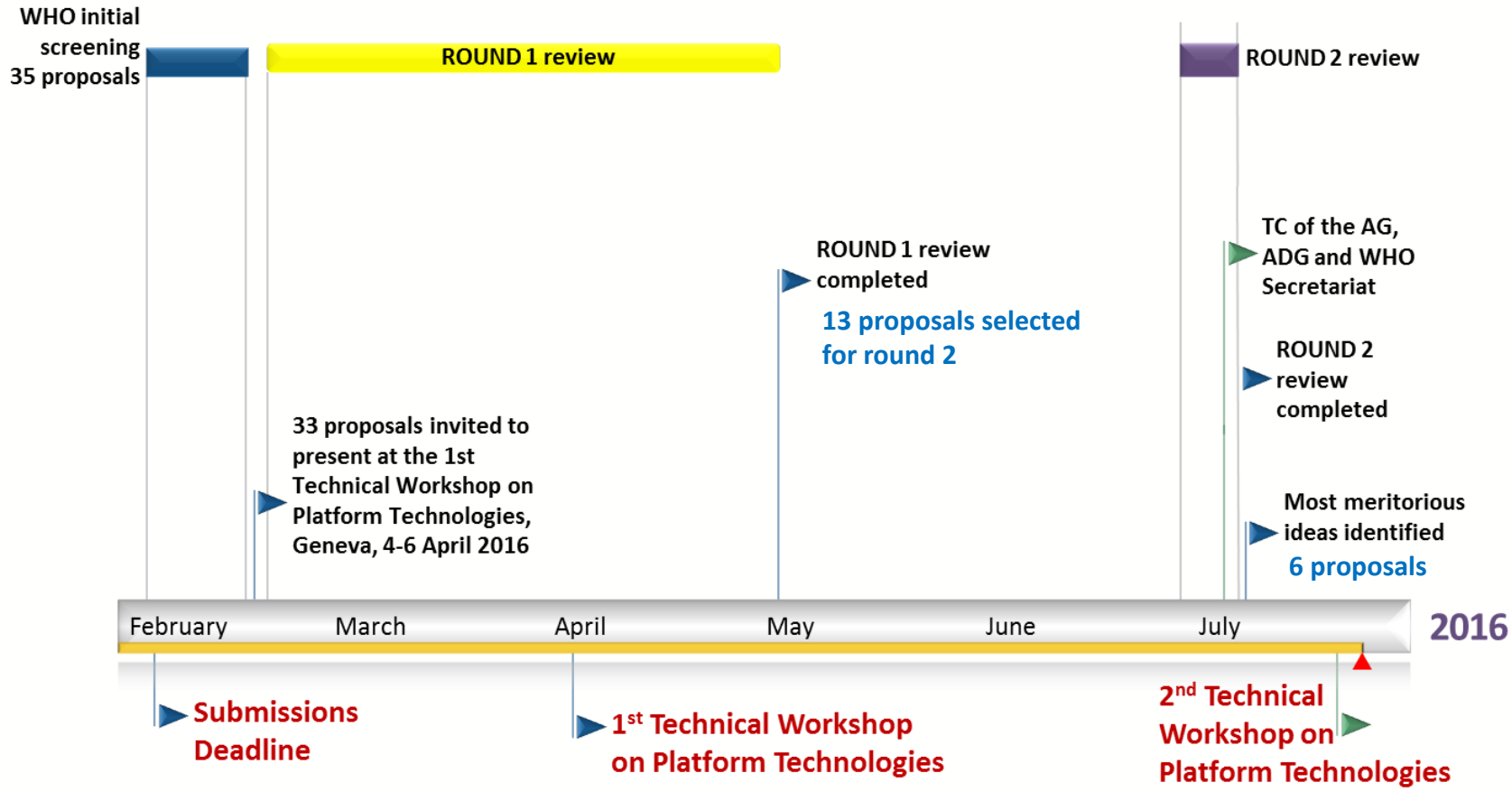
List of priority diseases 2017

(The order of pathogens on this list does not denote any ranking of priority)

- Lassa Fever and other severe Arenaviral haemorrhagic fevers
- Crimean Congo Haemorrhagic Fever
- Filoviral diseases (including Ebola and Marburg)
- MERS-CoV
- Other highly-pathogenic coronaviral diseases (such as SARS)
- Nipah and related henipaviral diseases
- Rift Valley Fever
- Severe fever with thrombocytopenia syndrome
- Zika

And any diseases identified by a decision instrument

Platform Technologies Public Consultation: Timeline



Proposals received and selected

Platform Technologies	Selected for round 1	Accepted for round 2	Selected
Vaccines	8	4	3
Immunotherapy	5	1	1
Antivirals	1		
Diagnostics	8	5	1
Two or more product streams	4	1	1
Enabling technologies	7	2	

Successful proposals

Platform technologies	Title	Lead institution and partners
Vaccine	Improving R&D readiness for priority infectious disease threats: development and utilisation of vaccine platform technologies	GlaxoSmithKline, LLC
	WHO R&D Blueprint: Janssen Vaccines – Jenner Institute complementary Vaccines Platform Technologies	Janssen Vaccines & Prevention B.V; Jenner Institute, Oxford
	MVA Platform Partnership	Bavarian Nordic A/S DZIF & PHE
Immunotherapy	Targeted Human Immunoglobulin to WHO Priority Pathogens Using Transchromosomic (Tc) Bovine	SAB Biotherapeutics
Diagnostics	**Diagnostic Preparedness Platform**	**Altona Diagnostics GmbH / Alere Inc**
All product streams	Accelerated Defense against Emerging Pathogen Threats "R&D toolbox" **Developing and validating tailored molecular and serological diagnostic tools;**	The Geneva Foundation (USAMRIID)

http://www.who.int/medicines/ebola-treatment/R-D-Blueprint_Evaluation-of-platform-technologies-for-priority-patho.pdf?ua=1

Interim evaluation of the process

Generated a new focus on preparedness and improved alignment with public health priorities;

Large collaborative effort: provided a networking opportunity for groups working in this area and/ or for groups that have complimentary ideas;

Conclusions

No funds awarded but selection of proposals presented to potential funders;

CEPI: Initial focus on vaccines. If successful, model could be extended to drugs, diagnostics or other products.

For more information

Platform technologies: http://www.who.int/medicines/ebola-treatment/R-D-Blueprint_Evaluation-of-platform-technologies-for-priority-patho.pdf?ua=1