

New developments and challenges on vaccine quality regulation: overview, progress and issues in the region

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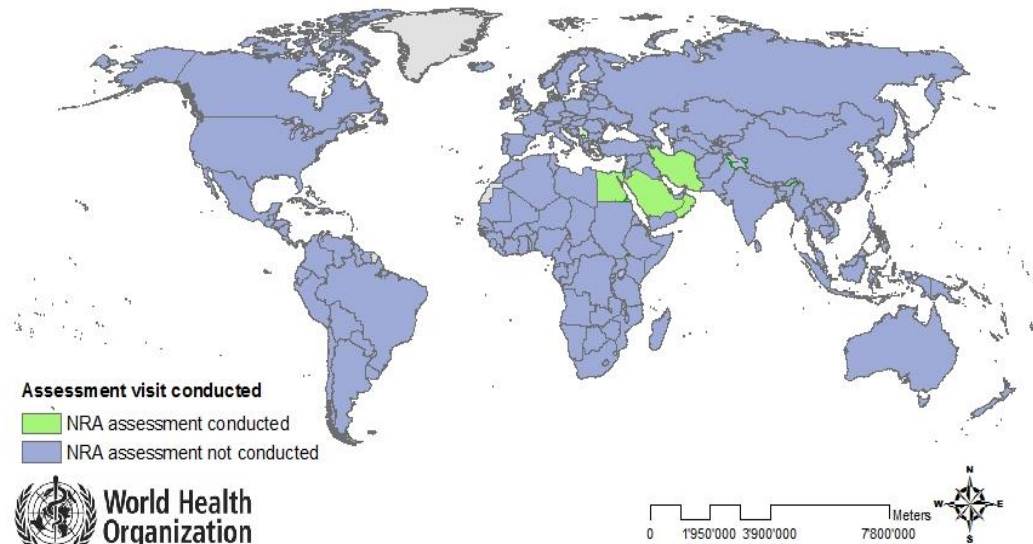
Regional Advisor Vaccine Quality and Management WHO SEARO

Topics

- New WHO Global Benchmarking Tool
- NRA capacity strengthening and concept of maturity level
- NRA strengthening challenges
- Rationalize NRA capacity strengthening through reliance and recognition
- NRA capacity strengthening priorities in SEARO

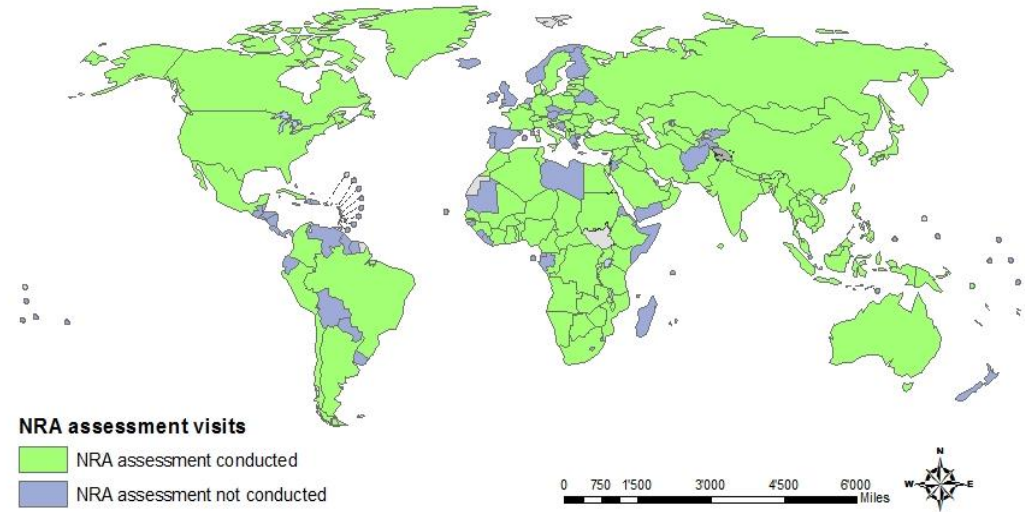
WHO NRA Assessment Visits

1997



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 Data Source: World Health Organization, Immunization Vaccines and Biologicals (IVB). Updated as of 2 May 2011
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2014



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Key Themes of WHO's 13th GPW 2019-2023

Mission

Promote Health - Keep the World Safe - Serve the Vulnerable

Strategic Priorities

Health Coverage: 1 billion more people with health coverage

Health Emergencies: 1 billion more people made safer

Health Priorities: 1 billion lives improved

NEW Cluster

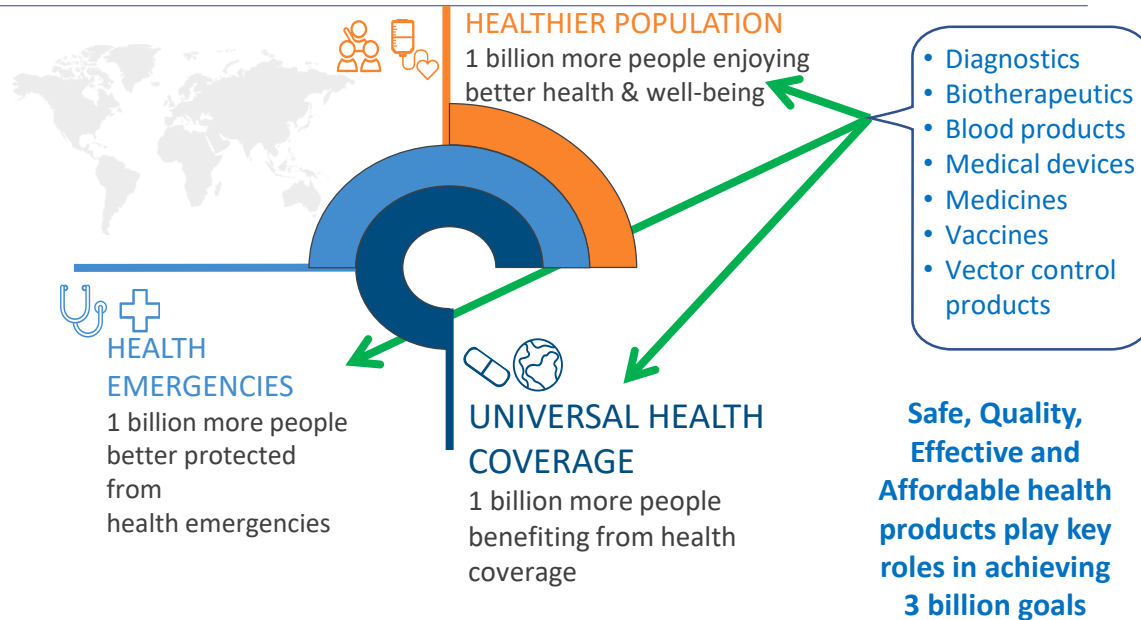
Access to Medicines, Vaccines and Pharmaceuticals (MVP)

at EB 2019

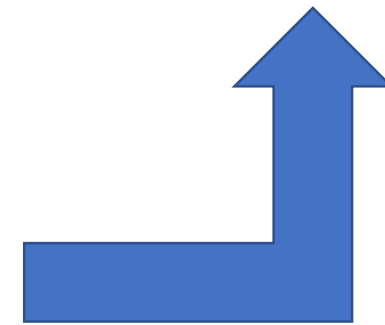
Roadmap on **access** to medicines and vaccines

http://www.who.int/medicines/access_use/road-map-medicines-vaccines/en/

WHO General Programme of Work - GPW 13



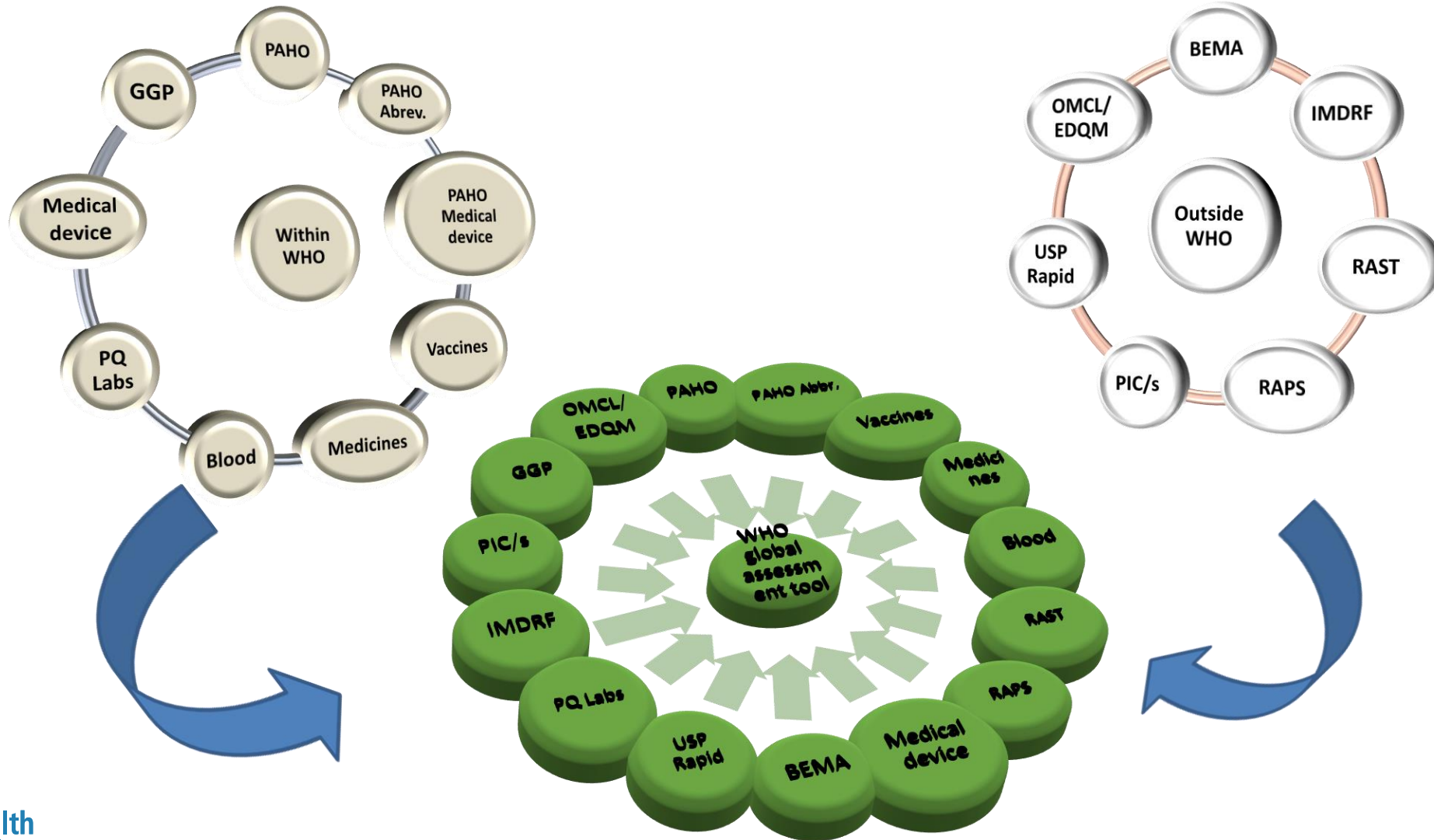
13th WHO Global Programme of Work 2019-2023 calls for a revised NRA Benchmarking tool



NEW Cluster **Access to Medicines, Vaccines and Pharmaceuticals (MVP)**

at EB 2019 Roadmap on **access** to medicines and vaccines
http://www.who.int/medicines/access_use/road-map-medicines-vaccines/en/

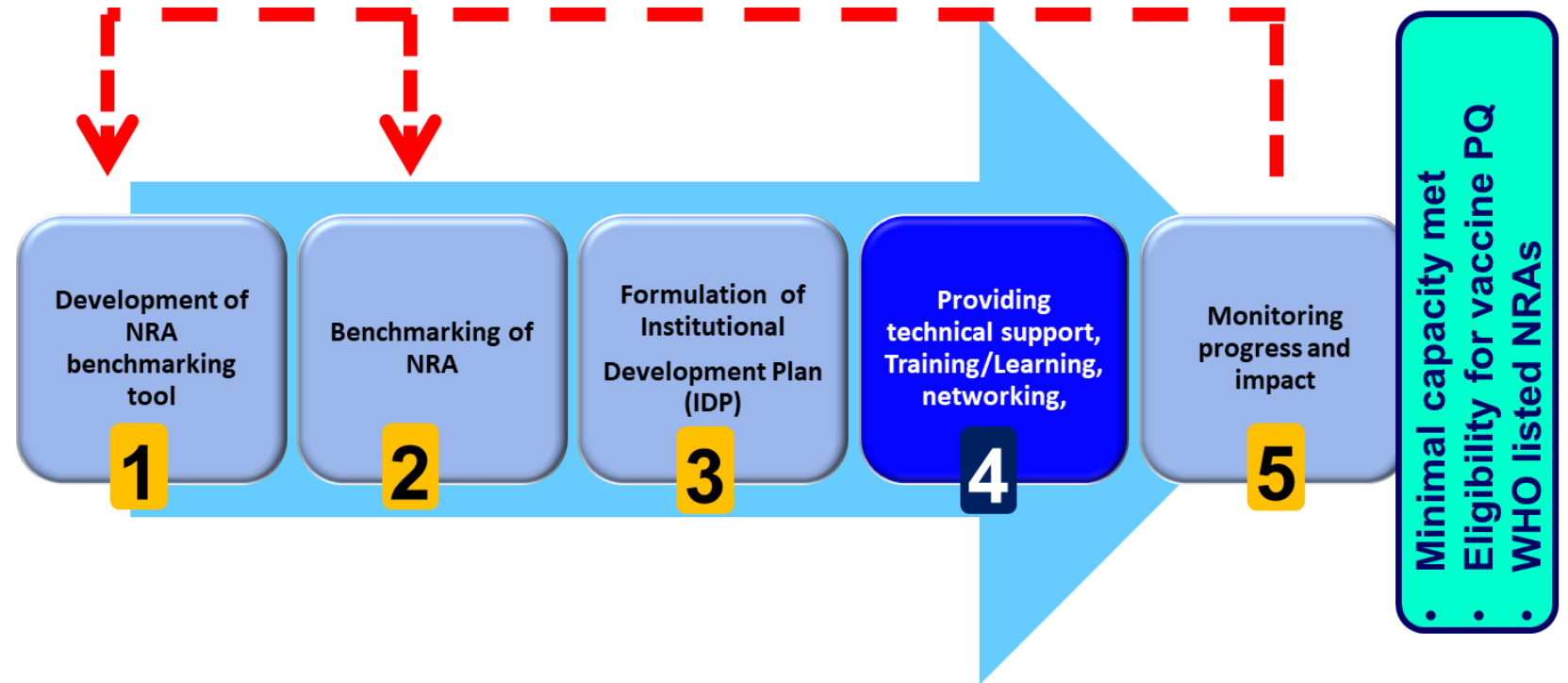
Global context: different assessment tools collecting information from Regulatory Authorities and affiliated institutions



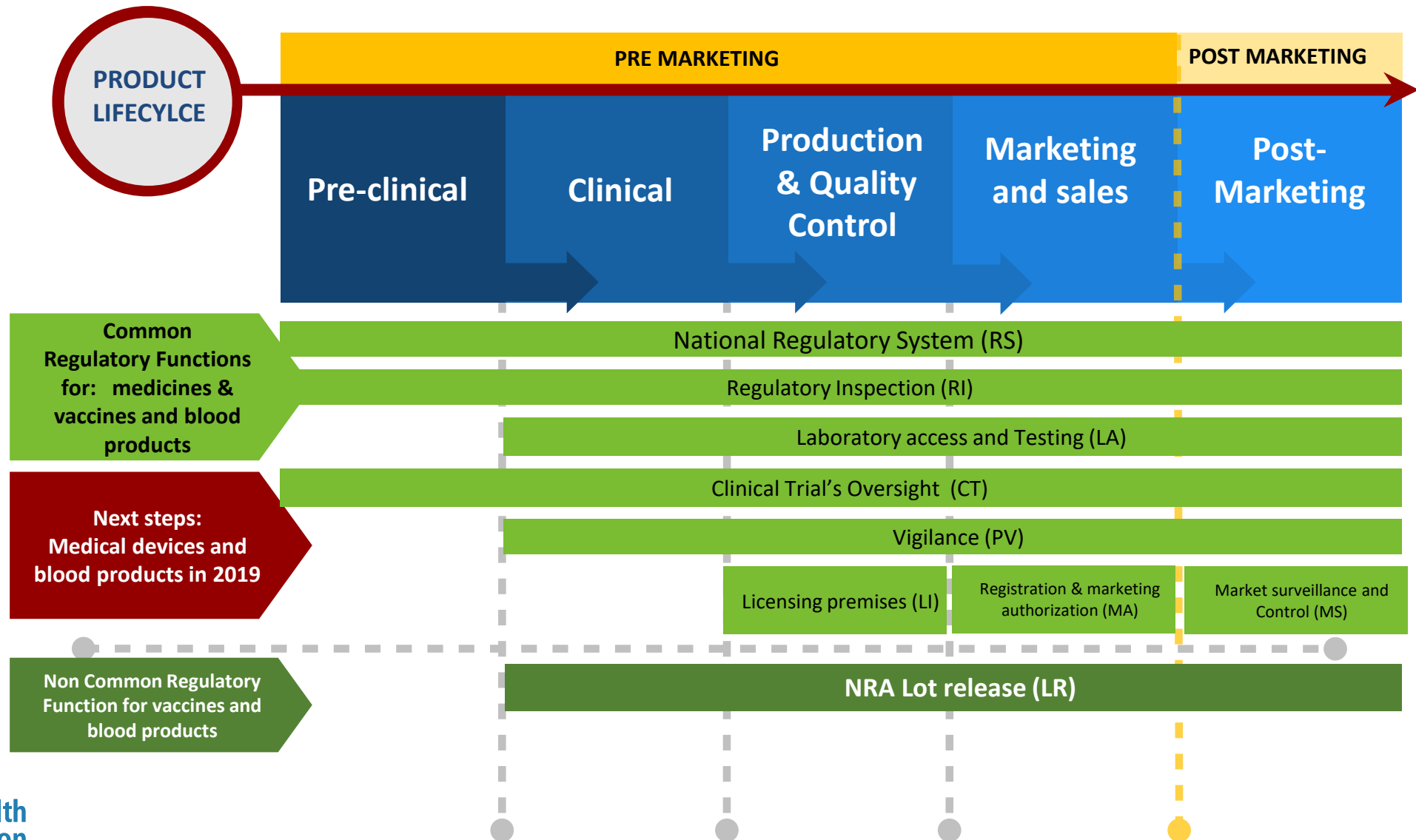
WHO Global Benchmarking Tool for NRA capacity systems

- Initially developed for vaccine regulatory systems, WHO new GBT includes new functions and indicators for safety and quality oversight for medicines and vaccines, but with a view to incorporating other product types in the future.

- WHO NRA capacity strengthening methodology applies the five steps approach.

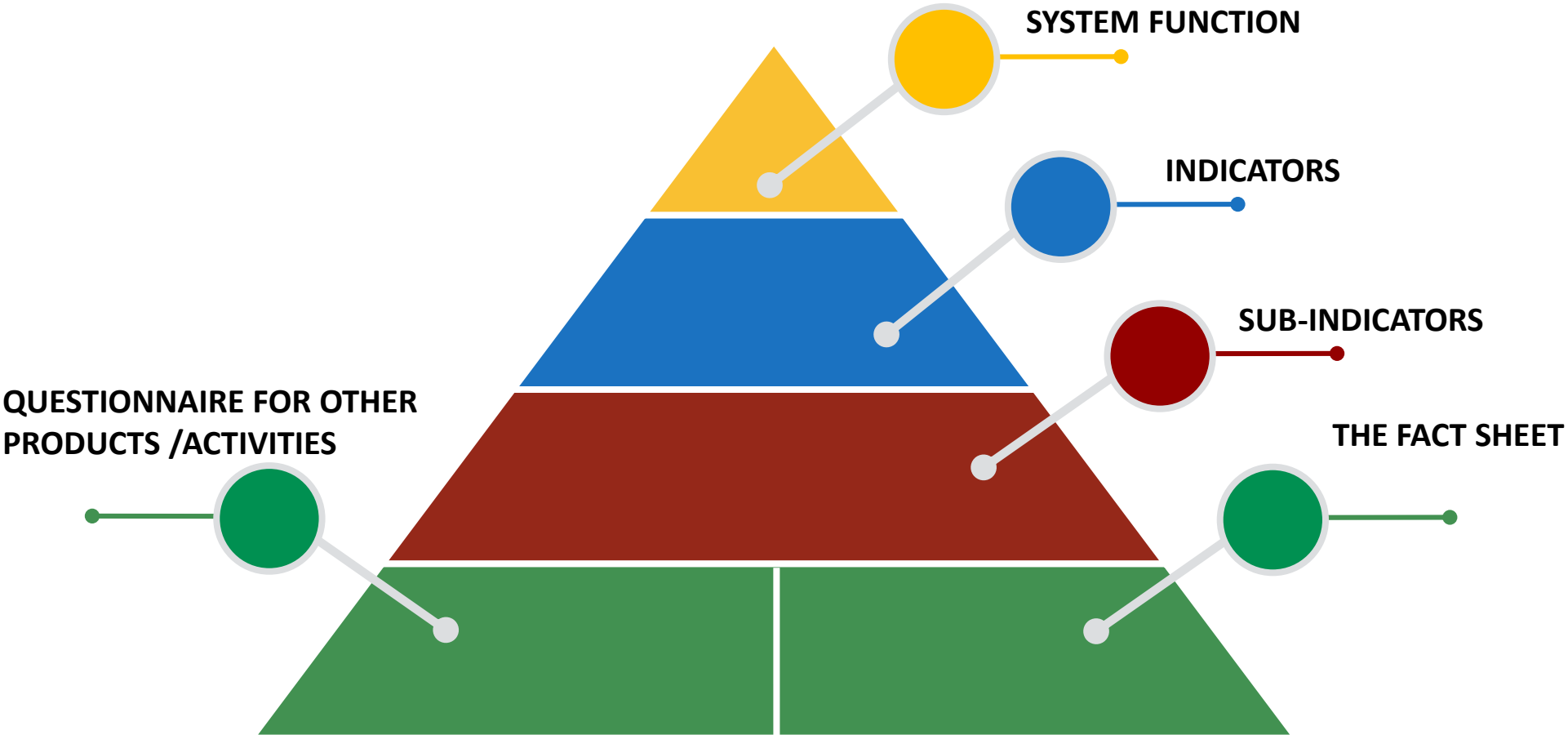


WHO RECOMMENDED REGULATORY FUNCTIONS FOR MEDICINES, VACCINES BASED ON PRODUCT LIFECYCLE



WHO Global Benchmarking Tool

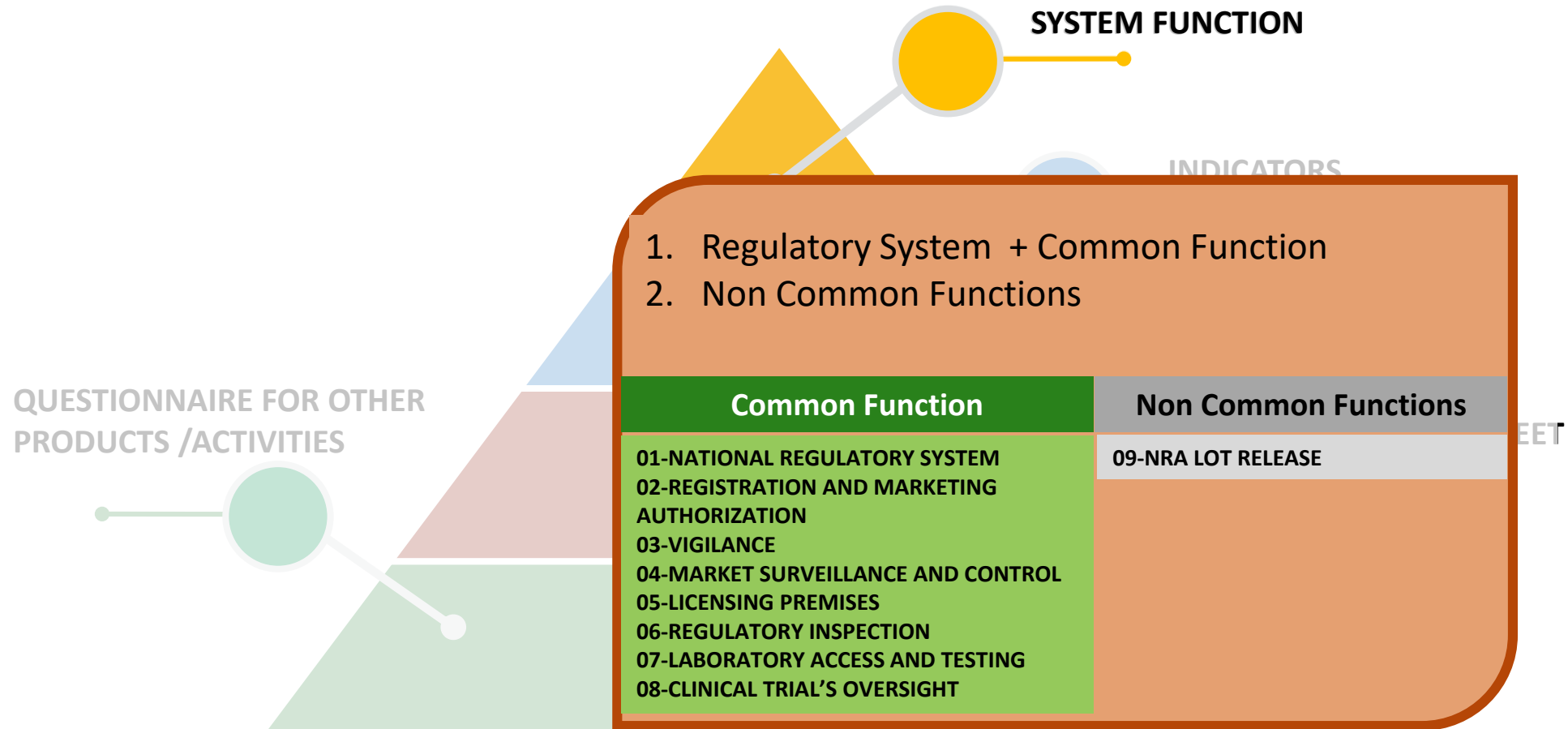
- Structure/Hierarchy



WHO Global Benchmarking Tool

- Structure/Hierarchy

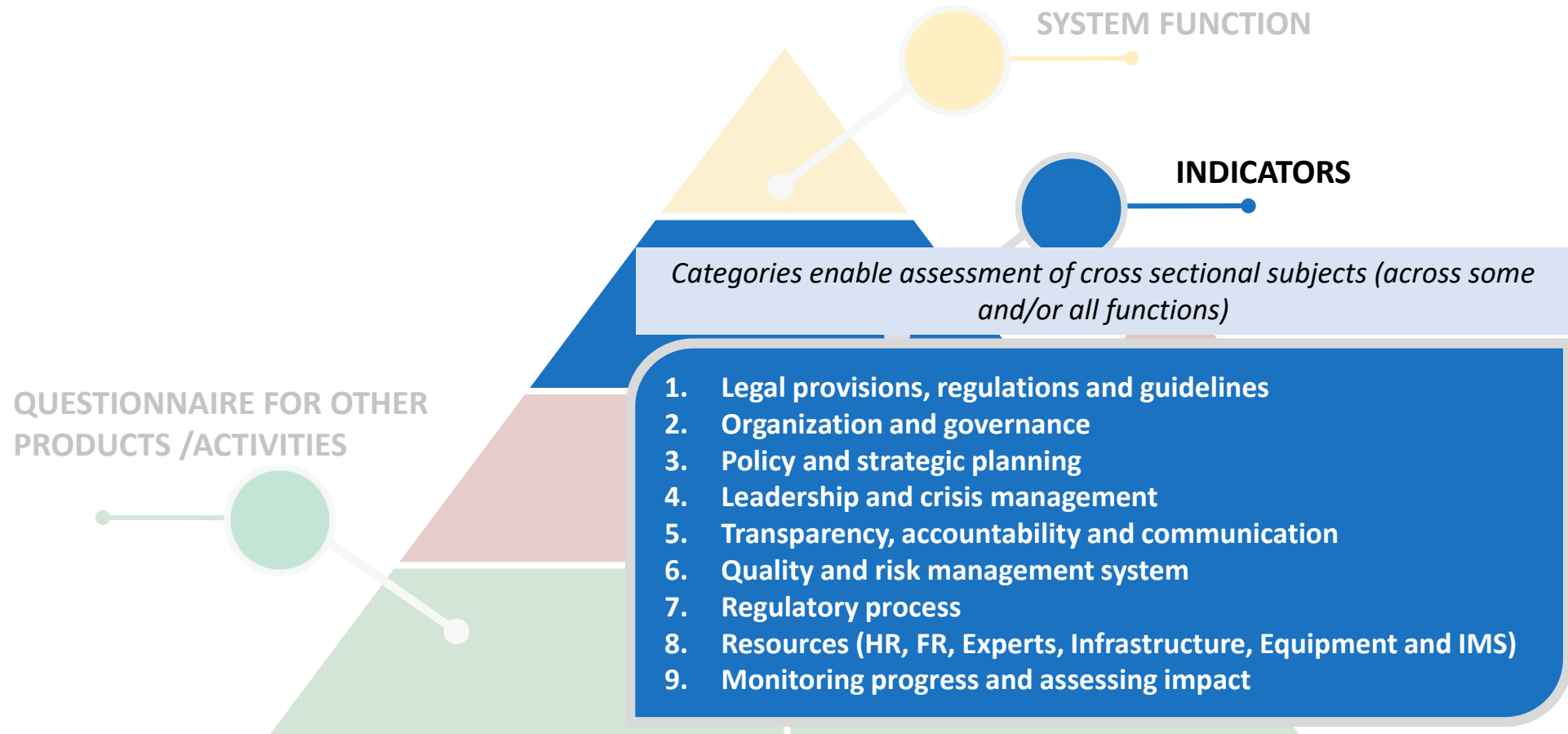
National Regulatory System (NRS) and Functions (NRF)



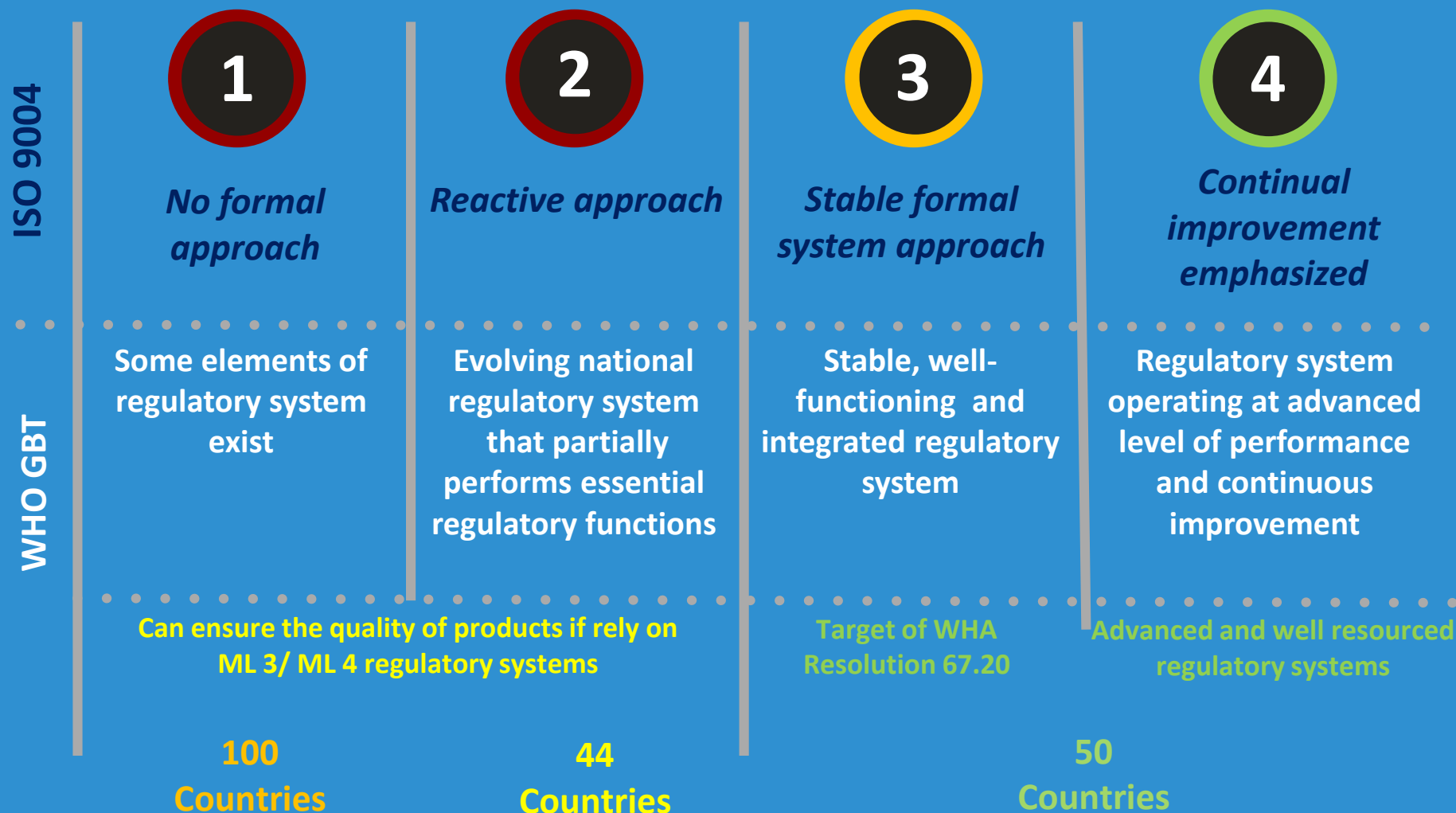
WHO Global Benchmarking Tool

- Structure/Hierarchy

Indicators Categorization (cross cutting subjects)



WHO GBT Performance Maturity Levels



Updated Figures of the WHO GBT revision VI

Item \ Function	RS	MA	VL	MC	LI	RI	LA	CT	LR	Grand Total
Number of Sub-Indicators	60	35	26	27	19	26	28	30	17	268
Sub-Indicators measuring maturity level 1	4	6	5	3	2	3	2	2	1	28
Sub-Indicators measuring maturity level 2	7	2	3	4	1	2	2	8	3	32
Sub-Indicators measuring maturity level 3	27	23	14	15	13	13	18	17	11	152
Sub-Indicators measuring maturity level 4	22	4	4	5	3	8	6	3	2	56

Minimal capacity

Advanced/reference NRAs

Regulatory systems' maturity level in SEAR

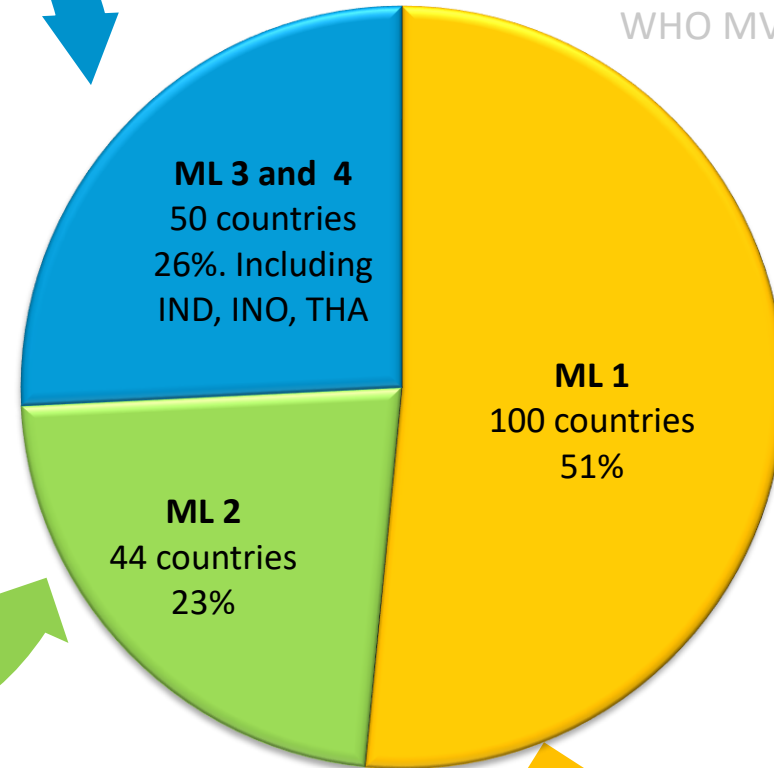
GBT in IND (2017), INO & THA (2018) show Mat3 and above for the three countries.

Self-assessment in BAN 2017 and SRL 2018.

- BAN multi –year plan to reach Mat 3 and above by 2020
- SRL formal assessment in Oct 2019

GBT assessment in DPRK 2018
Technical support for 3 months to finalize GBT, implement IDP and strengthen regulatory inspections

(Updated 8 Feb 2019)
WHO MVP/RSS/CRS

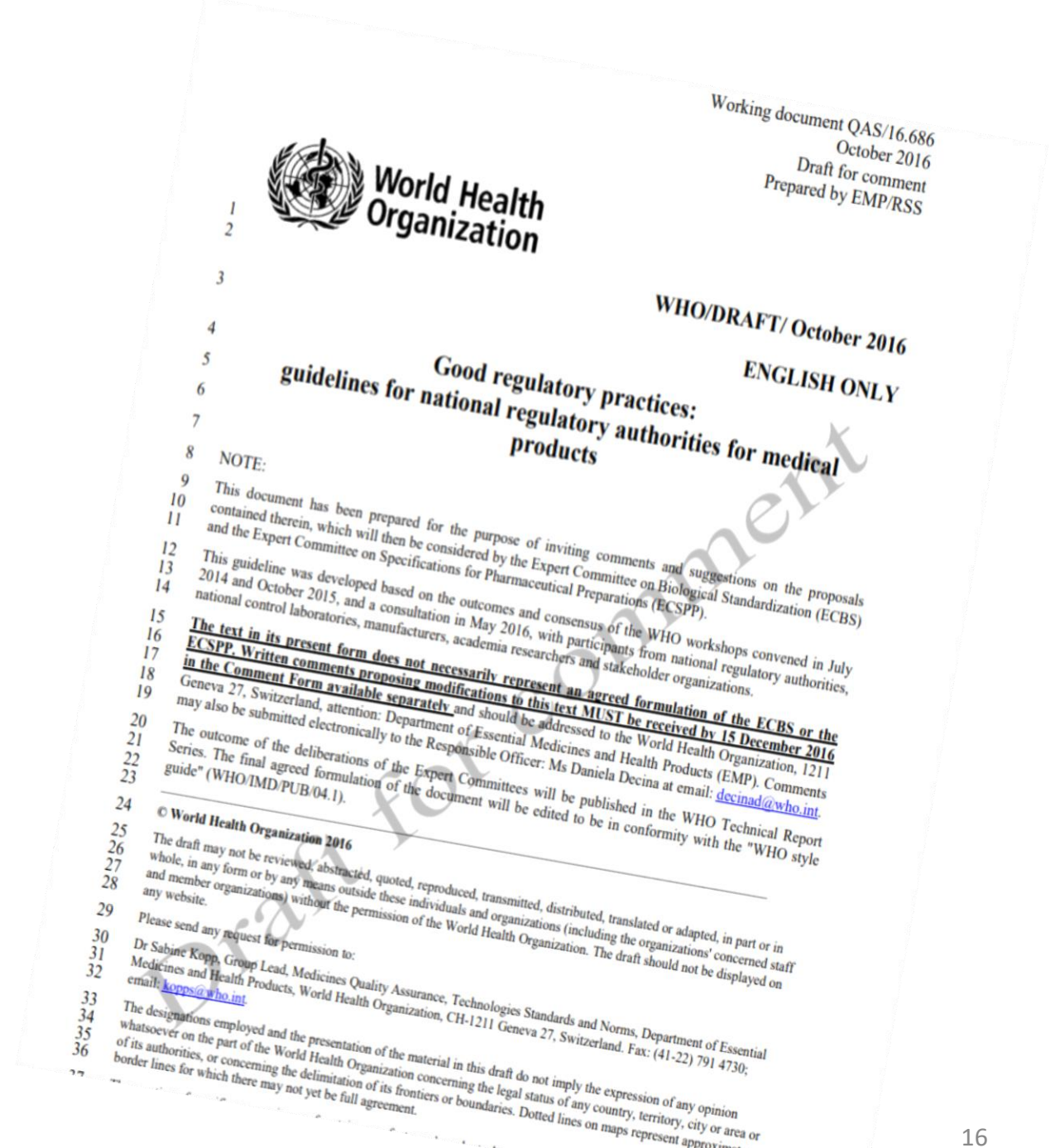


Regulatory challenges

- Regulators face an increasingly complex regulatory environment and need to cooperate
- Need to ensure product quality and supply chain security
- Need to ensure data integrity – can we rely on the data we get to support clinical trials and manufacturing?
- Need to support a global approach to authorization and supervision of medicines
- Need to avoid duplication and help create synergies
- The 4Cs: Communication, Collaboration, Cooperation, Coalitions

Defining reliance

- WHO GRP guideline offers helpful 2-step definition of reliance:
 - 1) take into account (part or fully) assessment done by others
 - 2) retain responsibility for your own decision



Definitions

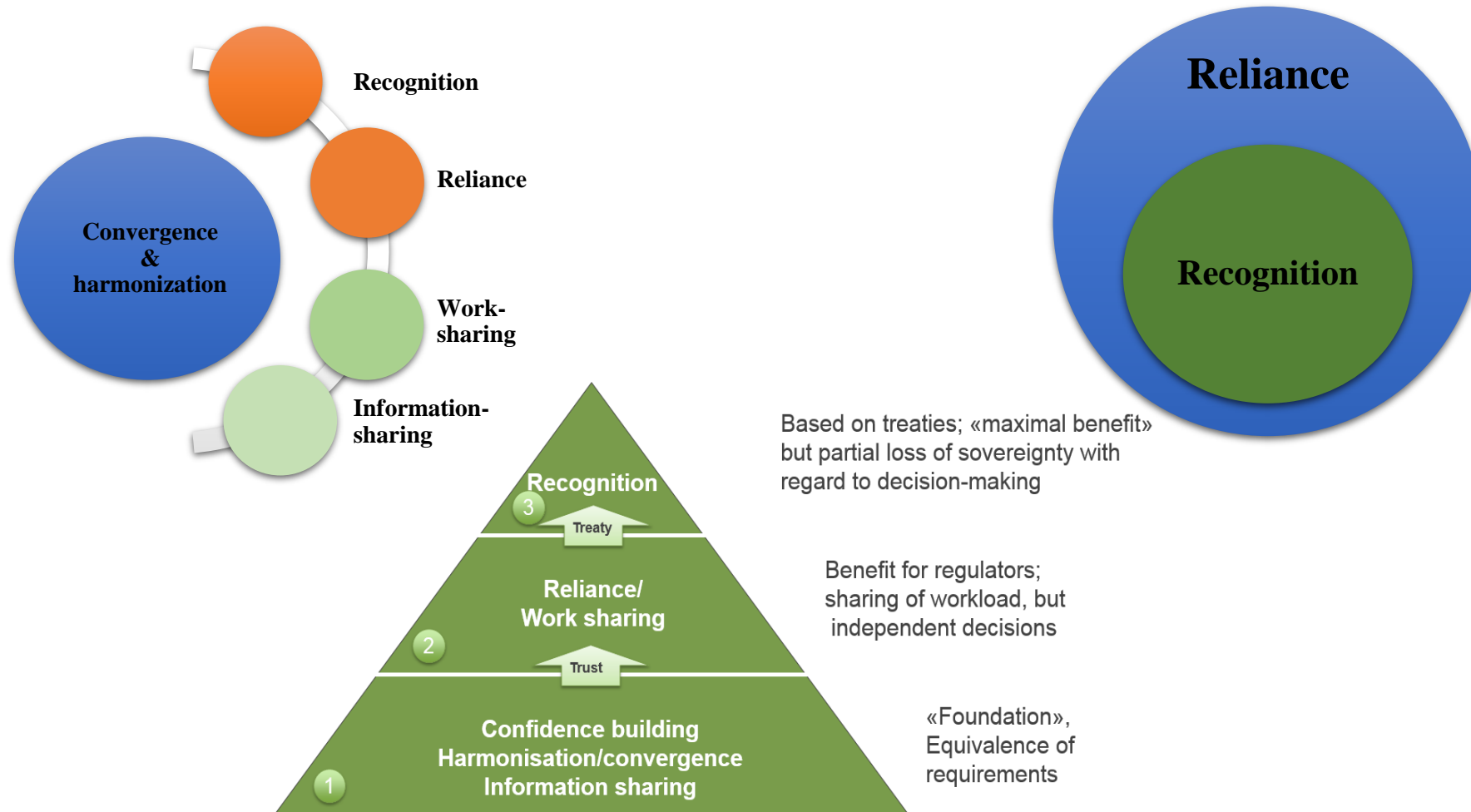
- **Reliance:**

act whereby a regulatory authority in one jurisdiction may take into account/give significant weight to work performed by another regulator or other trusted institution in reaching its own decision.

- **Recognition:**

the routine acceptance of the regulatory decision of another regulator or other trusted institution. Recognition indicates that evidence of conformity with the regulatory requirements of country A is sufficient to meet the regulatory requirements of country B.

Views on Reliance and Recognition



Reliance example #1: IGDRP

- International Generic Drugs Regulatory Programme
https://www.ema.europa.eu/en/documents/other/international-generic-drug-regulators-programme-information-sharing-pilot_en.pdf
- Pilot launched in 2012
- Uses EU decentralised procedure as model for sharing of generic products information among IGDRP authorities external to EU.
- Under the pilot arrangements, the assessment reports generated by the EU CP would be shared with collaborating IGDRP agencies outside EUs.

Reliance example #2: WHO

WHO Collaborative Registration: <https://apps.who.int/medicinedocs/documents/s22405en/s22405en.pdf> aims to:

- provide convenient tool for NRAs wishing to enhance their premarketing evaluation and registration system by taking advantage of the scientific assessment work conducted by WHO?PQT
- accelerate the approval process based on the EMA assessment, while allowing competent authorities which might have limited regulatory resources to fulfil their regulatory responsibilities and make their own decisions.

The procedure is not applicable to pharmaceutical products that have been listed as prequalified on the basis of approval by stringent NRA.

Reliance example #3: Article 58

- Introduced as a tool to help to expand LMIC access to new medicines and improve public health
- Promotes reliance through:
 - Involvement of experts/observers from 'target country' NRAs
 - Cooperation with WHO

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Official Journal of the

Article 58

1. The Agency may give a scientific opinion, in the context of cooperation with the World Health Organisation, for the evaluation of certain medicinal products for human use intended exclusively for markets outside the Community. For this purpose, an application shall be submitted to the Agency in accordance with the provisions of Article 6. The Committee for Medicinal Products for Human Use may, after consulting the World Health Organisation, draw up a scientific opinion in accordance with Articles 6 to 9. The provisions of Article 10

What is Article 58?

- EMA assessment of quality, safety, efficacy of medicine for use outside EU
- Collaboration with WHO + relevant non-EU regulators
- Licensing decision is taken by regulator in country where medicine or vaccine will be used
- Same scientific standards and procedures as for medicines for use in EU
- Benefit-Risk assessment focused on non-EU population

Outcomes 2005-2015



Mosquirix: malaria vaccine;

Pyramax: malaria treatment;

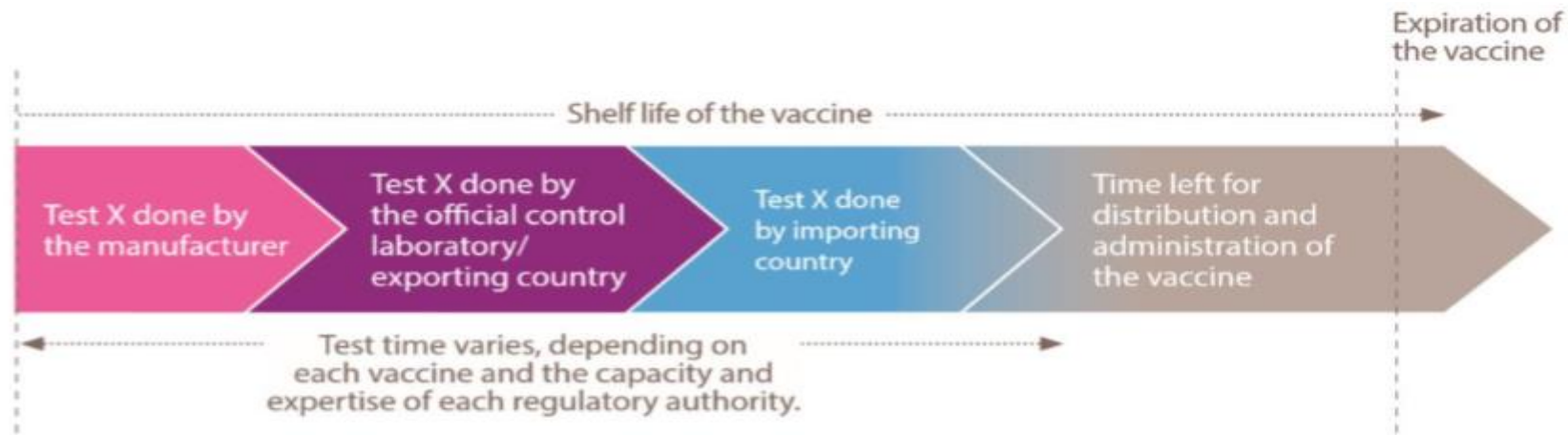
Hemoprostol: treatment of post- partum haemorrhage;

Alluvia, Lamivudine ViiV, Lamivudine/ Zidovudine ViiV: HIV treatments;

Hexaxim, Tritranix HB: combination vaccines against childhood diseases.

SEAR Regulatory challenges

- Country specific requirements for licensing distributors e.g.: office and staff, tender through local representative only, annual maintenance fees to continue registration
- Requirements for specifications e.g. markings, labelling color country specific and safety studies before the product is introduced in the NIPs.
- Expedited approval of PQ vaccine is not implemented for Market Authorization resulting in duplicating testing and other QC procedures despite of the PQ.
- NRA with limited capacity require registration of the product at least in 2 European countries before the product is registered.
- Sites visits of manufacturing facilities for GMP is required for MA in most of the countries despite the PQ and it is paid by the manufacturers.
- Several countries also want product testing in their NCL, which may result with increasing time for actual use from the moment the product is supplied to the country.



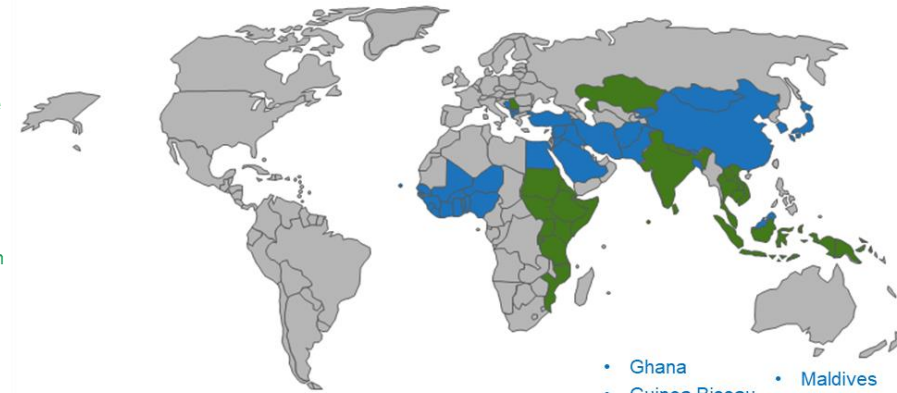
NRA capacity strengthening in SEA region

- Formal benchmarking in IND (2017); INO and THA (2018).
- Regional Training workshop on the use of WHO new BGT tools (2018)
- Supported self-assessment in DPRK and SRK. Formal GBT in SRK Oct 2019 and NEP Sep (2019)
- Capacity development planned endorsed by NRAs and TS is being provided in SRK (2 missions in 2018 and 1 in 2019), in DPRK with a TS for 3 months.

Countries/areas targeted for WHO Regulatory System Strengthening Program and benchmarked against GBT indicators between 2016- Feb 2019

Formal Benchmarking

- India
- Papua new guinea
- Timor-Leste
- Tanzania
- Burundi
- Ethiopia
- Mozambique
- Kenya
- Djibouti
- Eritrea
- Sudan
- South Sudan
- Somalia
- Uganda
- Serbia
- Cambodia
- Lao PDR
- Thailand
- Indonesia
- Kazakhstan
- Vietnam
- Rwanda



(Updated 15 Feb 2019)

Self Benchmarking

- Afghanistan
- Pakistan
- Malaysia
- Japan
- Iraq
- Jordan
- Lebanon
- Mongolia
- Kyrgyzstan
- Korea
- Bangladesh
- Iran
- Syria
- Egypt
- Saudi Arabia
- Gambia
- Benin
- Burkina Faso
- Guinea
- Sierra Leone
- Montenegro
- Bosnia and Herzegovina
- Macedonia
- Albania
- Kosovo area*

x4 Levels of Maturity with specific Technical Assistance Needs



Level 1

Deficiencies in most regulatory functions & high risk of high cost medicines with unassured quality.



Level 2

Regulatory system in place with limited enforcement of regulatory functions high to moderate risks of high cost medicines of unassured quality



Level 3

Moderate to high staff competency, specific regulatory deficiencies requiring targeted support for technical improvements to meet local pharma industry requirements



Level 4

High competency staff, deficiencies that can be addressed through improved policy guidance, dialogue, and capacity building. Technical staff involved in regulatory networks, collaborative works and development of norms and guidelines

Direct Assistance

– WHO's support to include direct technical, operational and financial support to strengthen basic NRA functions focusing on QMS, licensing and PV through regional collaboration e.g.: GLO, Twinning programme with strong NRA in SEA, MLQC network

Assistance through collaborative mechanisms

– WHO's support focused on filling critical regulatory gaps and reduce risks of medicines of unassured quality through promoting use of WHO PQ medicines and CIP. Regional collaboration with support for regulatory inspection, Lab access in addition to above.

Strategic Support

– WHO's support is focused and targeted to address key deficiencies and gaps in specific components of the regulatory system including full implementation of QMS and compliance with BGT

Policy Dialogue

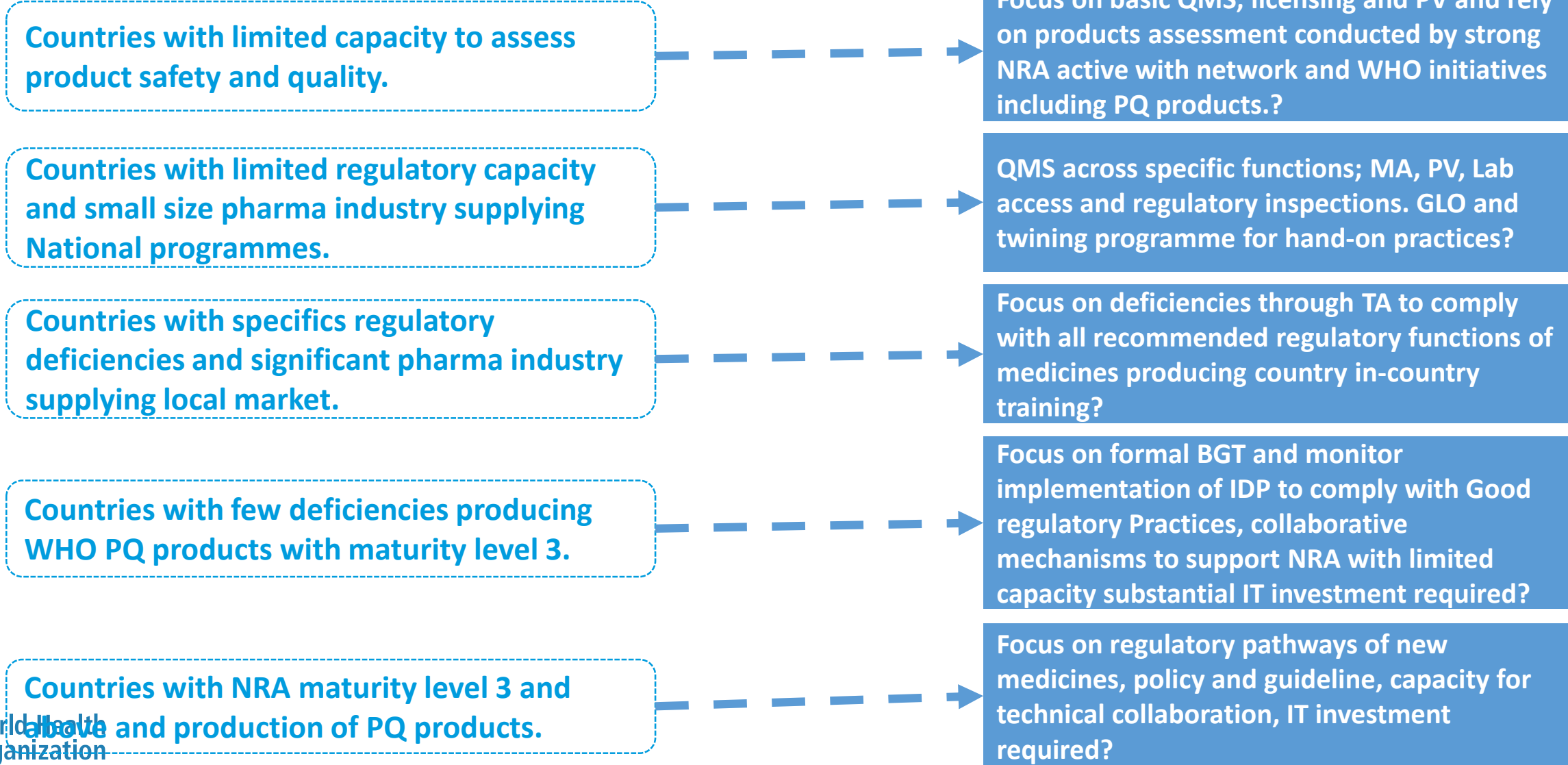
– WHO's support is focused on advising and guiding Ministries of Health on regulatory policies and best practices including south-south exchanges and institutional capacity building. Develop formal bi-lateral collaboration to assist NRA with limited capacity

x5 SEA Context Specific Dimensions

and LIC
Lower MIC
Upper MIC

Context Specific Dimensions

Example of Main Focus?



Discussion points for plenary

- **What are the NRA requirements for MA in the countries importing vaccine**
- **Currently how long it takes to MA vaccines ?**
- **What are the country NRAs part or willing to join International Generic Drug Regulators Programme (IGDRP) and or apply collaborative procedures to MA vaccines ?**
- **What are the barriers to apply collaborative procedures for MA.**

Thank You