WHO vaccines prequalification overview

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Outline

- Introduction
- Principles
- Pre-conditions for PQ evaluation for Vaccines
- Conditions for prequalification
- Prequalification process
- Post Prequalification activities
- Technical assistance and capacity building
- Preparing for success for PQ

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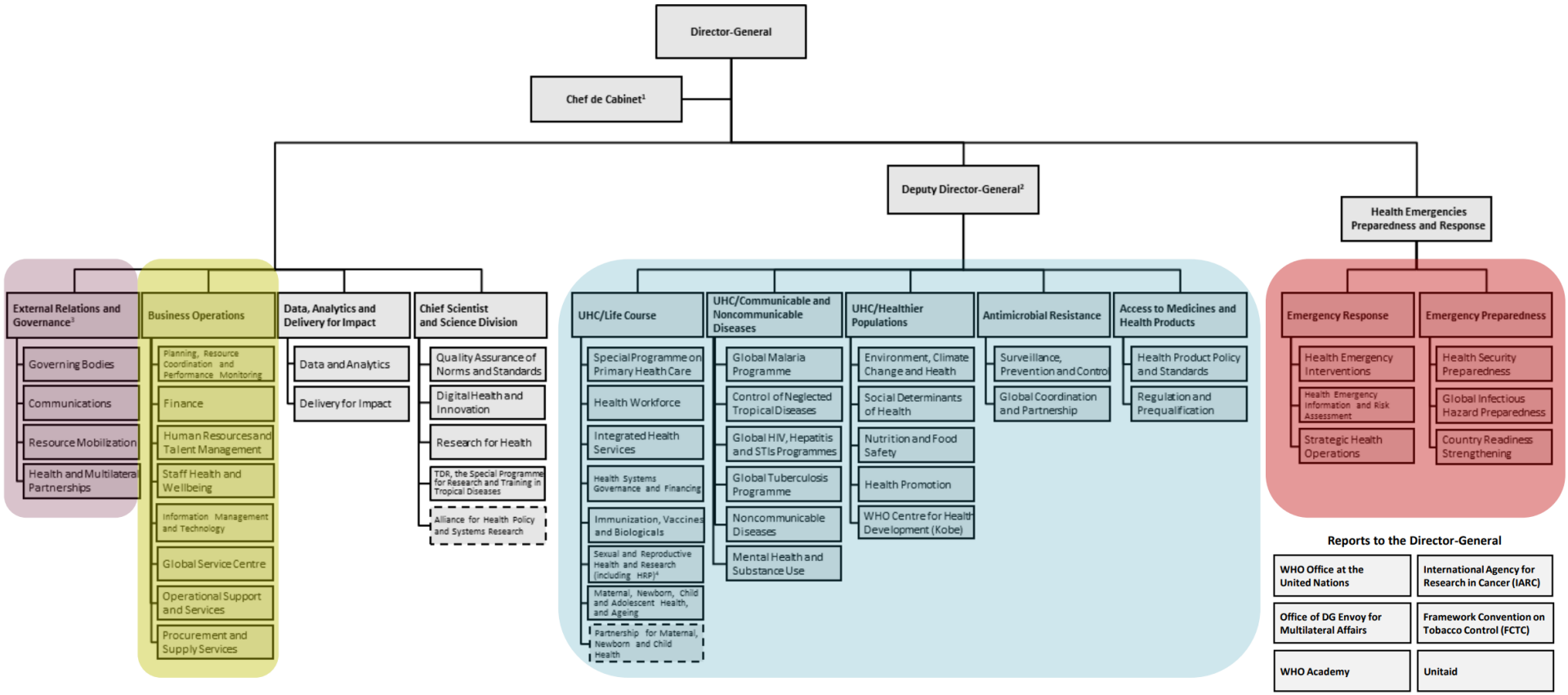
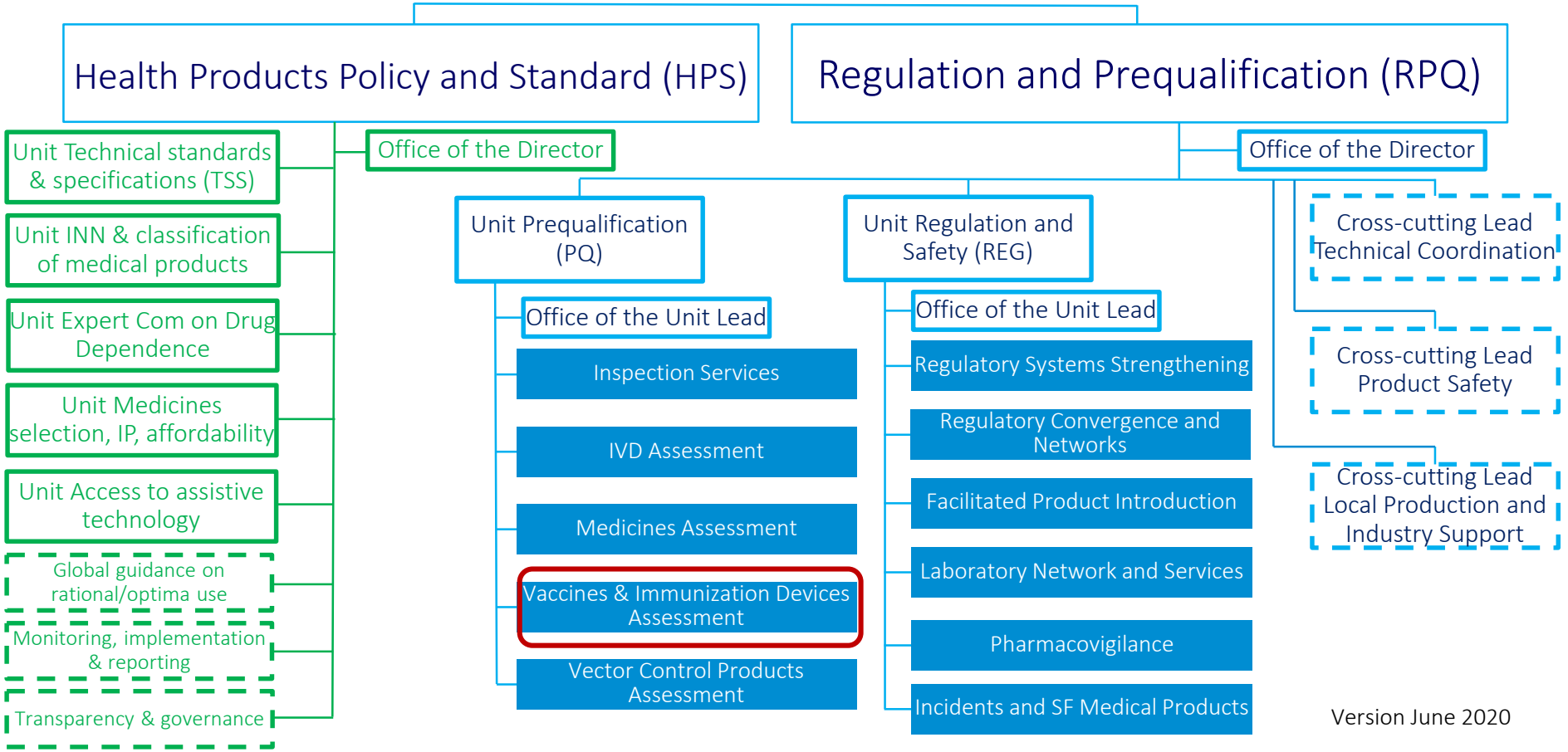
Introduction
WHO organigramme



External Relations | Business Operations | **PILLARS** | Programmes (UHC & HEP) | Preparedness & Response

Introduction
Access to Medicine and Health Products organigram



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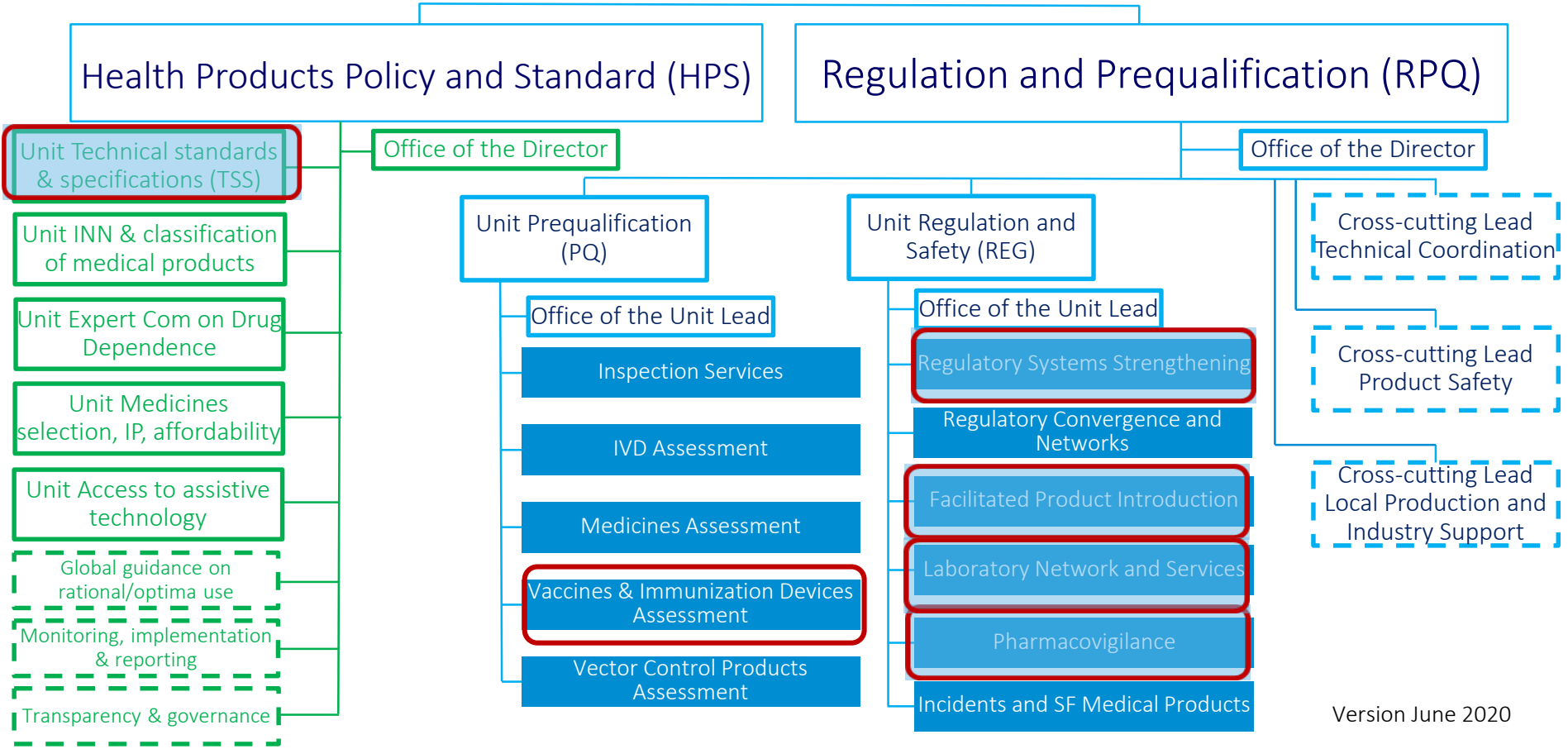

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Introduction
Prequalification (PQ) of Vaccines by WHO

PQ of Vaccines

- started 1987, originally request by UNICEF and PAHO to evaluate quality, safety and efficacy of vaccines in the context of national immunization programmes,
- 154 vaccines prequalified to-date (246 presentations)

Facilitates registration in developing countries

Countries can rely on PQ assessment, inspection, lot testing, etc.

PQ can also rely on other assessments

Source: http://www.who.int/immunization_standards/vaccine_quality/progress_report_who_pqp_june2013.pdf?ua=1

Introduction
Purpose of WHO Vaccines PQ Programme

- ✓ A service provided to UN purchasing agencies.
- ✓ Provides independent opinion/advice on the quality, safety and efficacy of vaccines for purchase
- ✓ Ensures that candidate vaccines are suitable for the target population and meet the needs of the programme
- ✓ Ensures continuing compliance with specifications and established standards of quality

Introduction
WHO Goal for vaccines regulation

Ensure that “100%” of vaccines used in all national immunization programmes are of assured quality

Definition of “Vaccines of Assured quality”

- ✓ National Regulatory Authority (NRA) independent from vaccine manufacturer & procurement system
- ✓ NRA is functional *or at least maturity level 3*
- ✓ No unresolved reported problem with vaccine

WHO guidance by Experts Committee on Standardization of Biologicals (ECBS) recommendations on safety, efficacy and quality issued in WHO Technical Report Series (TRS)

Introduction

Assessment pathways for vaccines and other biologicals

Prequalification (PQ)

- Response to the need of procurement agencies and Member States for quality-assured health products, by creating and applying quality-assurance mechanisms
- Reliance on “Stringent Regulatory Authority” possible

Risk based assessments time limited

- Licensed/PQ vaccine for emergency use (i.e fractional dose)
- Emergency use and assessment listing EUL
- Stockpiles: smallpox and polio
- Snake antivenom

Introduction

PQ is not a regulatory body

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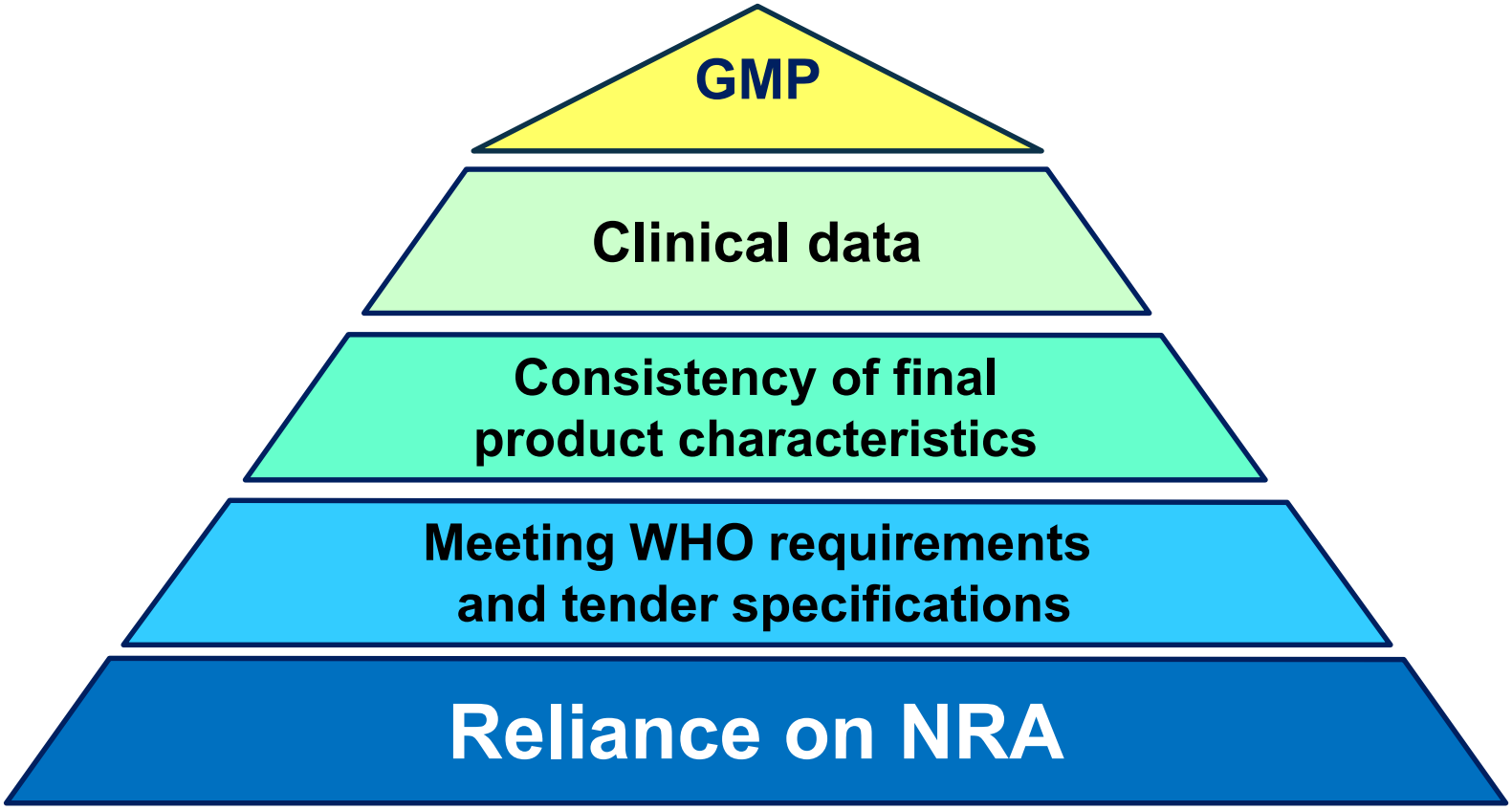
Principles


GMP
Clinical data
Consistency of final product characteristics
Meeting WHO requirements and tender specifications
Reliance on NRA

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Pre-conditions for PQ evaluation for Vaccine

Reliance on the National Regulatory Authority (NRA) of the exporting country

- NRA must be assessed as functional as a result of successful evaluation using the WHO NRA Global Benchmarking tool
- NRA's functional status needs to be sustained over time
- Continued regulatory oversight by NRA is required as well as communication with WHO about potential problems with the vaccine
- Agreements are established with the NRAs for information exchange when a vaccine is about to be prequalified

Pre- conditions for PQ evaluation for Vaccine

- Vaccine is licensed/registered by the responsible NRA (Scientific opinion by EMA accepted)
- WHO guidelines/recommendations approved by the ECBS are available (published in the WHO Technical Report Series)
- Listed in the vaccine priority list (low priority vaccines may be postponed depending on workload and no priority vaccines will not be reviewed)

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Conditions for prequalification

Ongoing oversight and commitments by the NRA

Lot to lot release

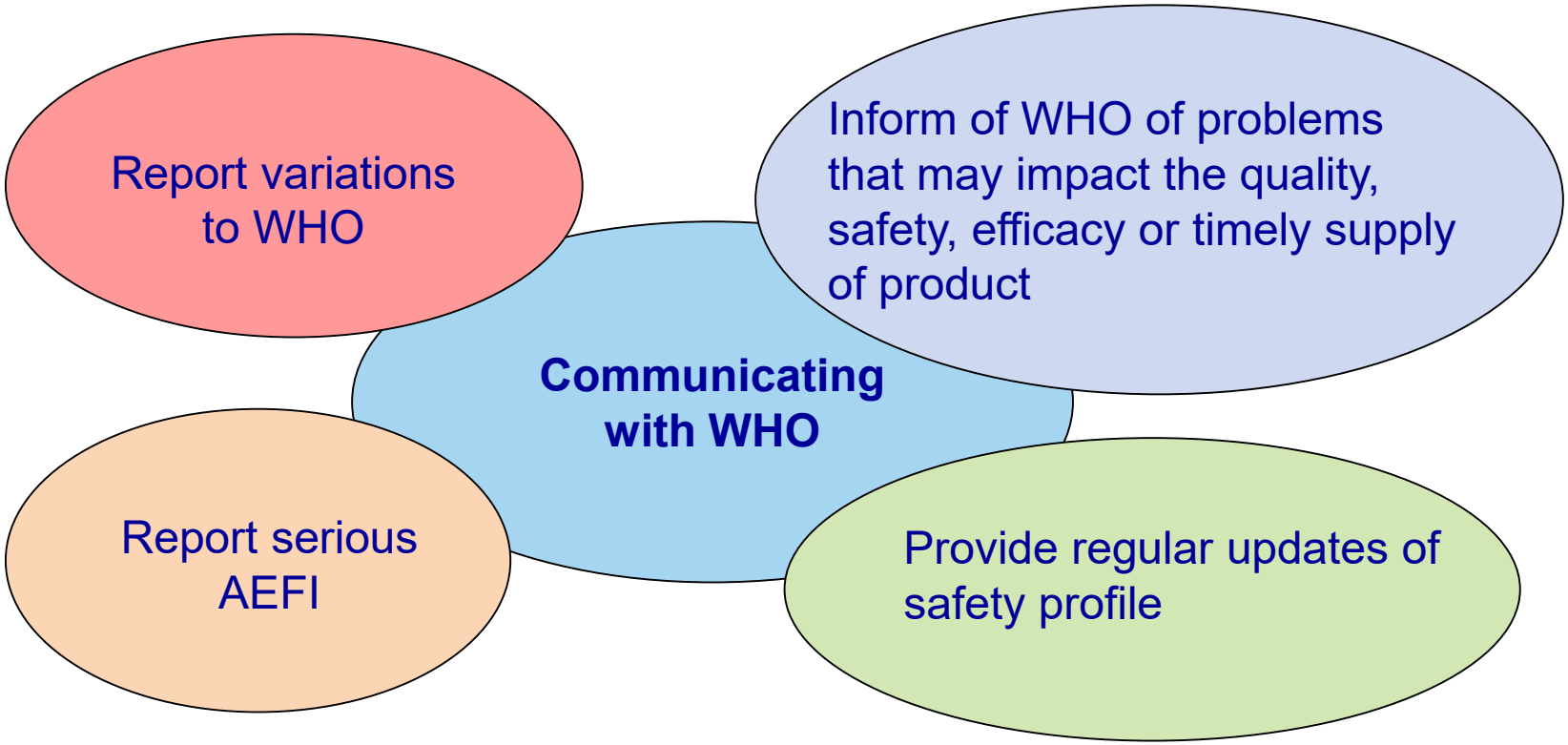
- **Inspections** at regular intervals.
- **Inform** WHO of **serious GMP deviations**

- **Post-marketing surveillance** for safety and efficacy
- Inform WHO in case of reports of **serious AEFI**

Inform WHO in case of **withdrawals or recalls of lots** and **license suspensions**

Conditions for prequalification

Commitments from the manufacturer



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Prequalification process

- Pre-submission meetings with manufacturers interested in submission are encouraged
- Notification of intended submission
- Dossier Submission
  - Product Summary File (until end 2021)
  - Common Technical Document (mandatory from Jan 2022)
- Screening
- Acceptance decision

Prequalification process

- Scientific review of quality dossier
- Scientific review of clinical data
- Testing of samples
- Consultation with responsible NRA
- Site audit of manufacturing facilities

Prequalification process

Programmatic Suitability for PQ (PSPQ):

Ensure that vaccines **used in low and middle income countries** can be used safely and effectively, **given the constraints and conditions** of their immunization systems

Nicaragua, rotavirus delivery, Photo: Gates Foundation

Mali, polio campaign, Photos: WHO/Olivier Ronveaux

Prequalification process

Programmatic Suitability for PQ (PSPQ):

- **Objectives :**
  - ✓ Judge the programmatic suitability against defined mandatory, critical and preferred characteristics
- **Benefits :**
  - ✓ Give clear directions to vaccine manufacturers before PQ submission
  - ✓ Reduce decision making time

Prequalification process

PSPQ criteria

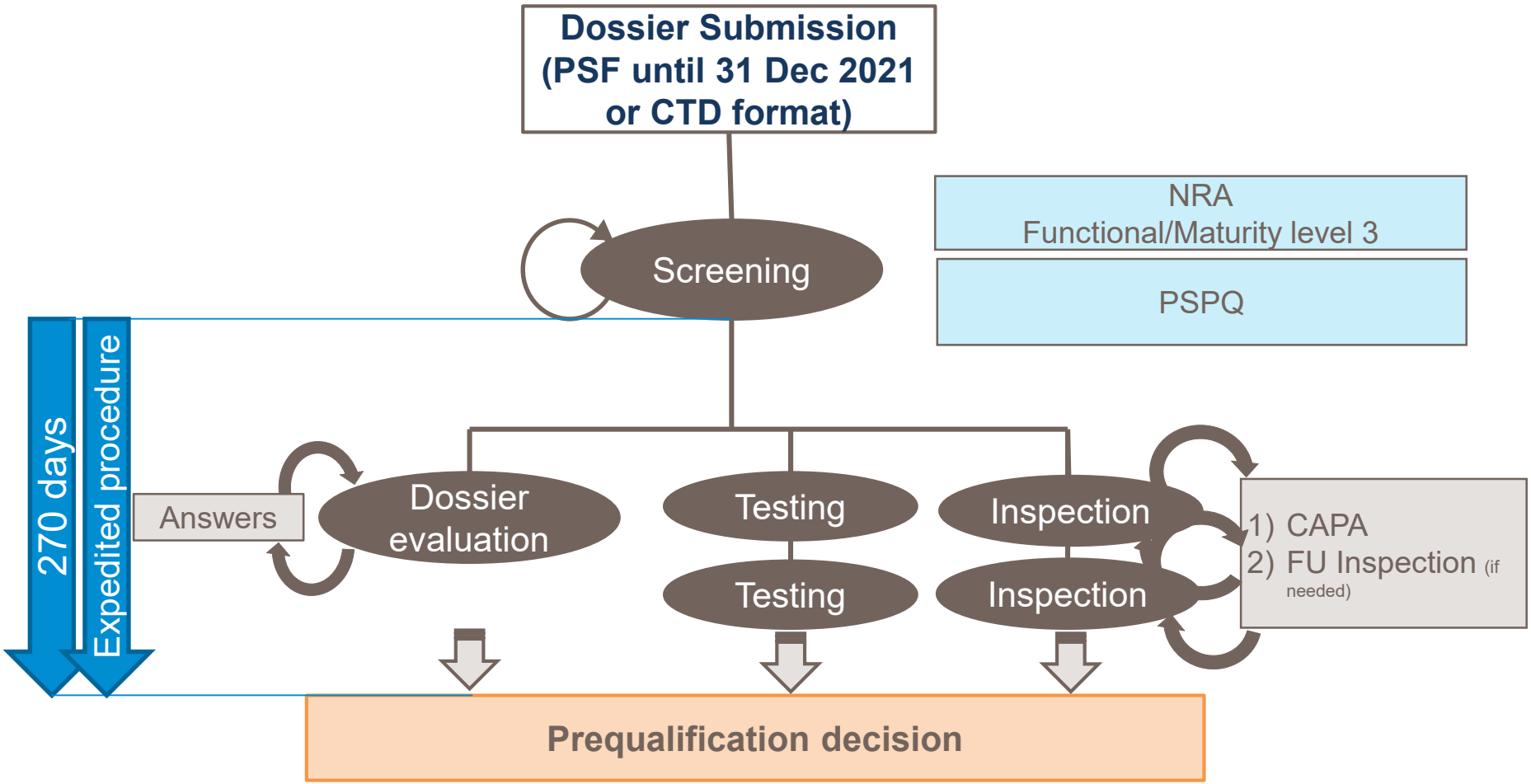
Mandatory

- Compliance is **compulsory**
- Failure to meet this characteristic will prevent the vaccine to be further considered for pre-qualification

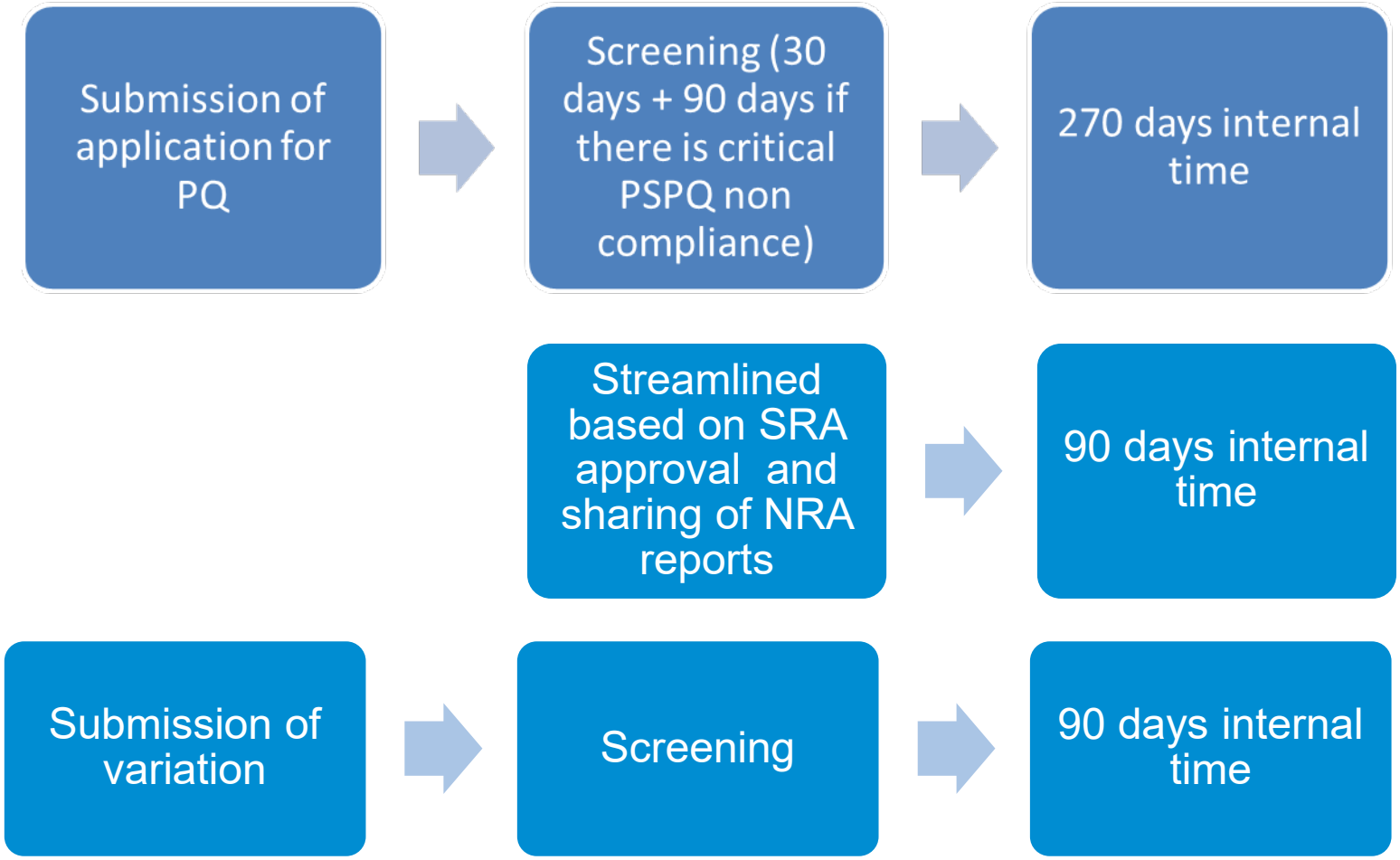
Critical

- Compliance is also **compulsory**
- **However,** deviations in vaccine characteristics will be reviewed by the Programmatic Suitability for WHO Prequalification (PSPQ) Standing Committee
- Under special circumstances exceptions can be granted to vaccines that deviate from the critical characteristics.
- **Decision can only be taken by the PQ Secretariat** and will include consideration of recommendations from the PSPQ Standing Committee and consideration of topics such as public health need and access to vaccines.

Prequalification process - flowchart



Prequalification process: timelines (excluding applicant response times)



Prequalification process

Critical requirements for PQ

Quality	Clinical	Programmatic	Regulatory
• Stability data at accelerated conditions to allow implementation of VVM • Manufacturing and QC data • GMP compliance	• Clinical expectations (immunogenicity / efficacy / safety)	• Compliance with Programmatic suitability criteria (PSPQ): • Relevance to preferred target product profile. • MDVP, VVM (e.g, non-auto-disable prefilled syringes, stability profile and VVM)	• Registration by functional NRA • Compliance with global standards and PSPQ (i.e., monodose vs multidose presentations), Non-auto-disable syringes

Prequalification process

As part of the evaluation procedure, consultation with NRA

- To discuss regulatory status of the concerned vaccine/s
- Clinical performance in country of manufacture if used
- Quality evaluation, outcome of recent GMP inspections
- Compliance with specifications (trends from lot release data)
- Regulatory actions
- Informal agreement for information sharing with WHO recorded in Consultation report

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Post Prequalification activities

- Variations
- Annual Report evaluation
- Reassessment (frequency defined on risk analysis basis)
- Targeted testing program with contracted laboratory: once a year testing of samples of lots shipped to countries to ensure continuing compliance with specifications
- Monitoring/Investigation of vaccine quality and cold chain complaints
- Monitoring/investigation of Adverse Events following immunization (AEFI) (with collaboration of the responsible NRA)
- Collaborative National Registration
- Technical Review of tenders for UNICEF

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Technical assistance and capacity building

- Meetings with manufacturers at early stages of vaccine development. Advice on product characteristics and clinical development.
- PQ briefing workshops
- Support to IFPMA and DCVMN
- Support to regulatory networks: DCVRN, AVAREF

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Preparing for success for PQ

- Where is the vaccine to be manufactured?
- What is the status of the NRA in that country?
- Are programmatic suitability and PQ conditions met?
- What are the expected timelines for CT, regulatory submission, PQ submission?
- Is there a need to develop WHO (ECBS) guidelines/ recommendations?
- Inclusion on priority list – prepare in advance

Thank you