

Traceability and Verification

Session 9 UNICEF UNFPA WHO meeting with manufacturers and suppliers
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Traceability & Verification System
for Health Products

The Verification and Traceability Initiative was created to address the impact of falsified and diverted products

\$30.5 Bn

Falsified vaccines and medicines cost LMICs \$30.5 billion per year.

10.5%

Falsified products accounted for 10.5% of medicines sampled in the supply chain in these countries.

169,000

Estimated 72K – 169K deaths caused by substandard and falsified antibiotics in children under 5 suffering from pneumonia*

116,000

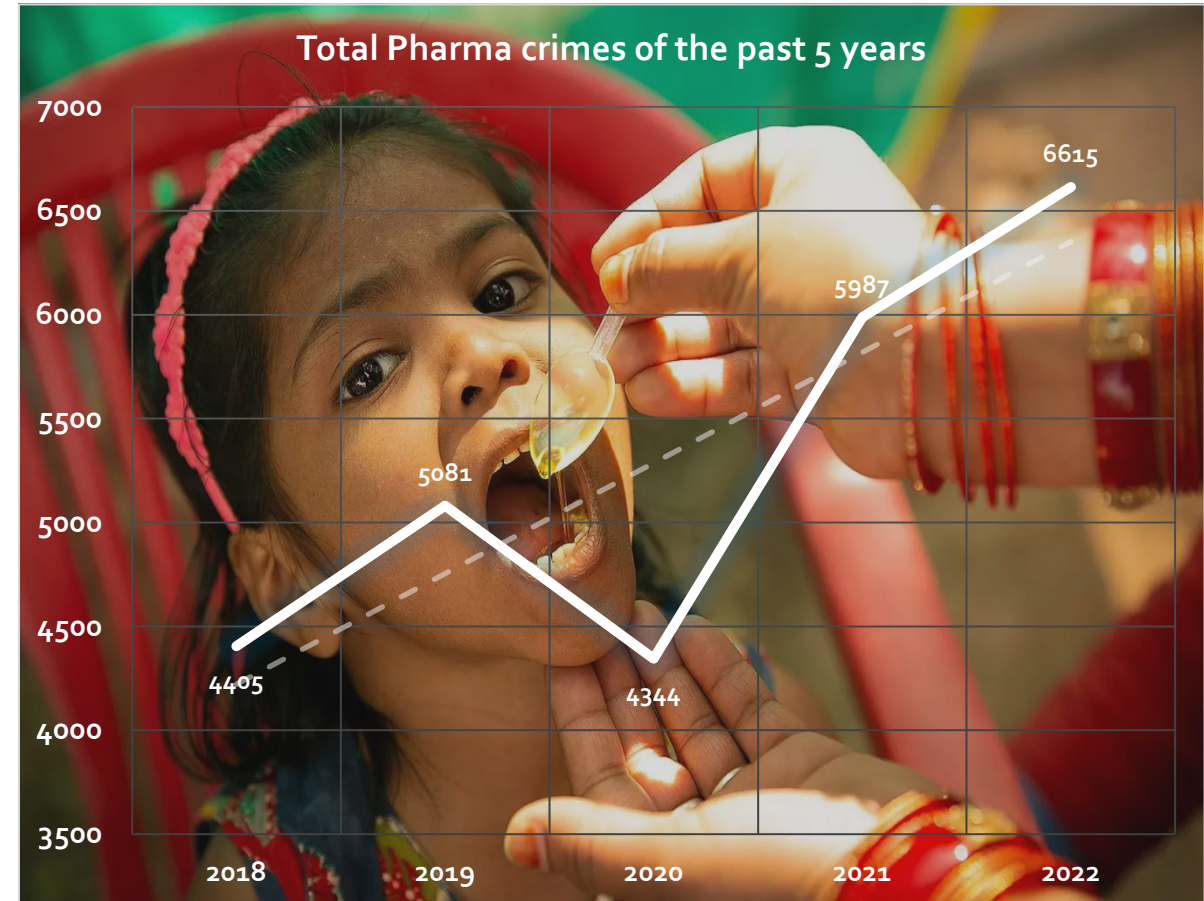
Estimated 31K – 116K deaths caused by substandard and falsified antimalarials in sub-Saharan Africa*

Sources:

The WHO Member State Mechanism on Substandard and Falsified Medical Products Update 2022

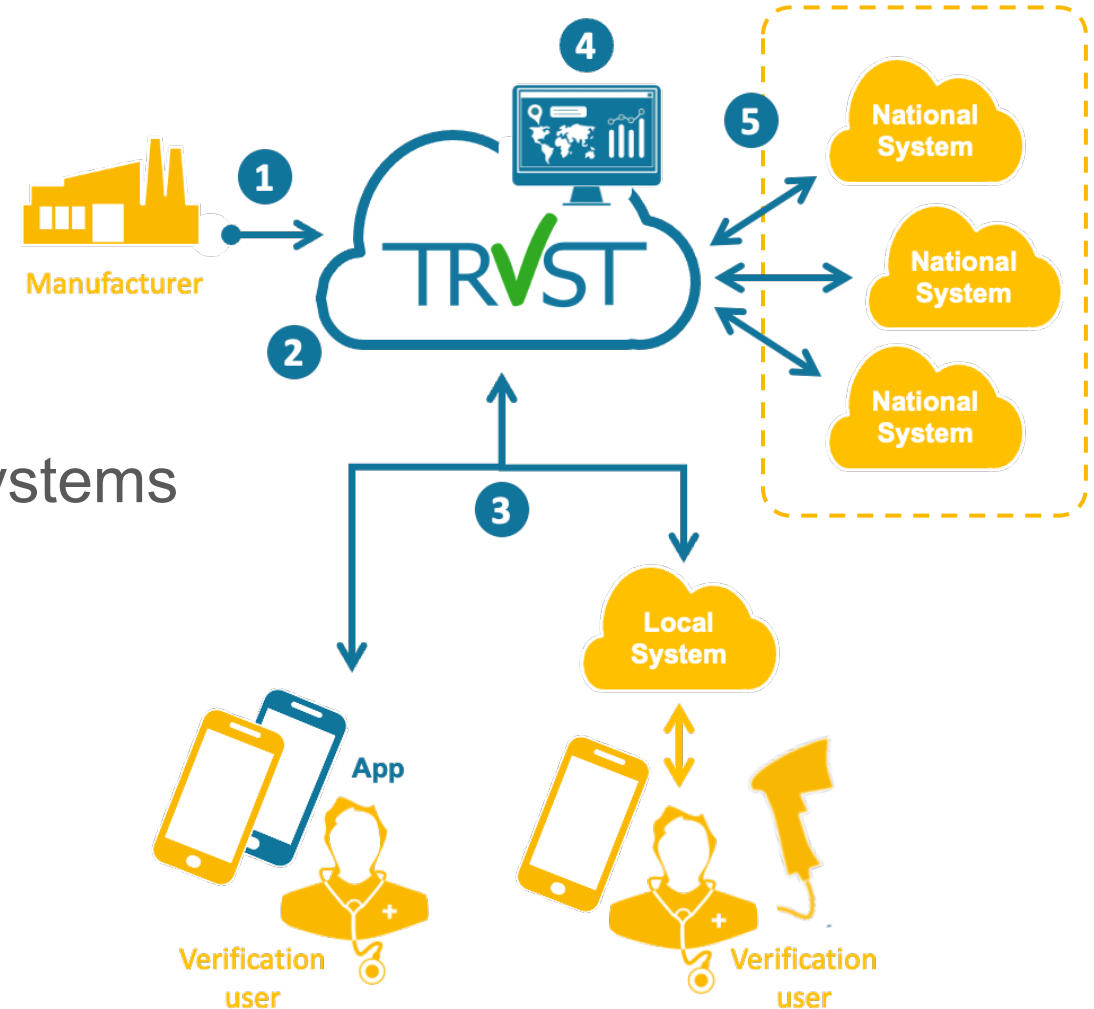
* Public health and socioeconomic impact study 2017 <https://apps.who.int/iris/handle/10665/331690>

* University of Edinburgh

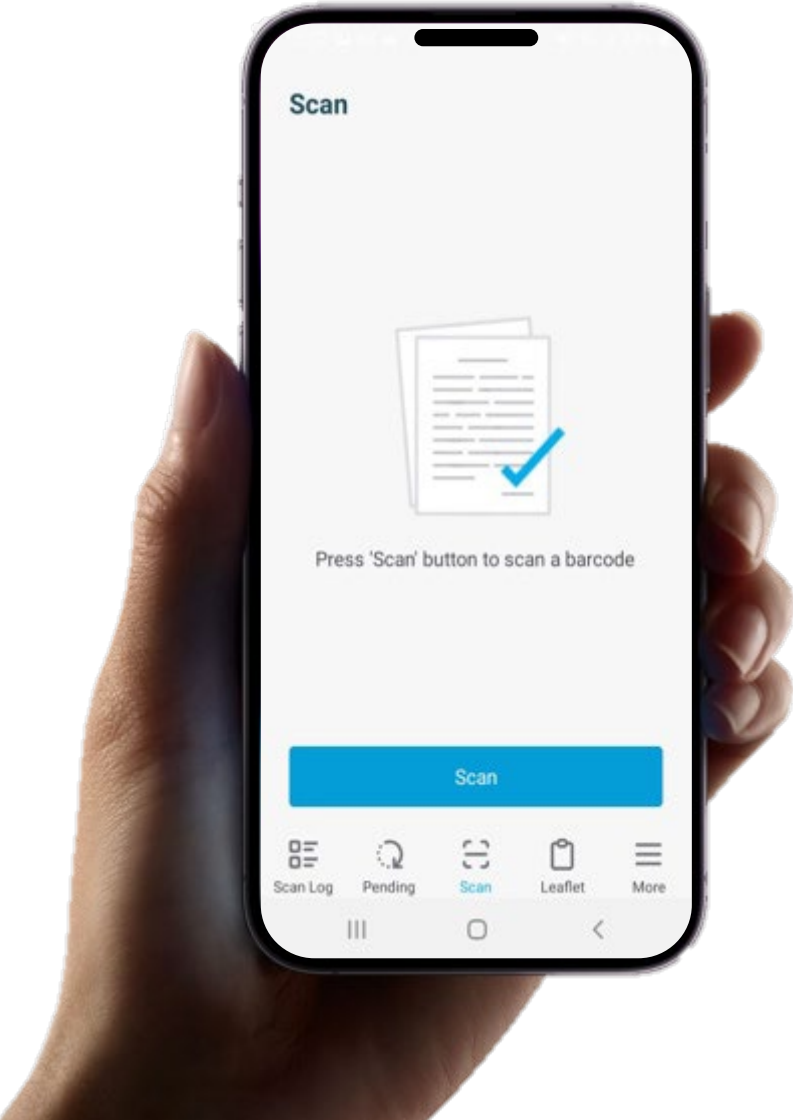


The TRVST system components

- 1) A standard interface to manufacturers
- 2) The TRVST repository
- 3) Verification API to smart phones and local systems
- 4) The TRVST dashboard
- 5) TRVST API interface to national systems



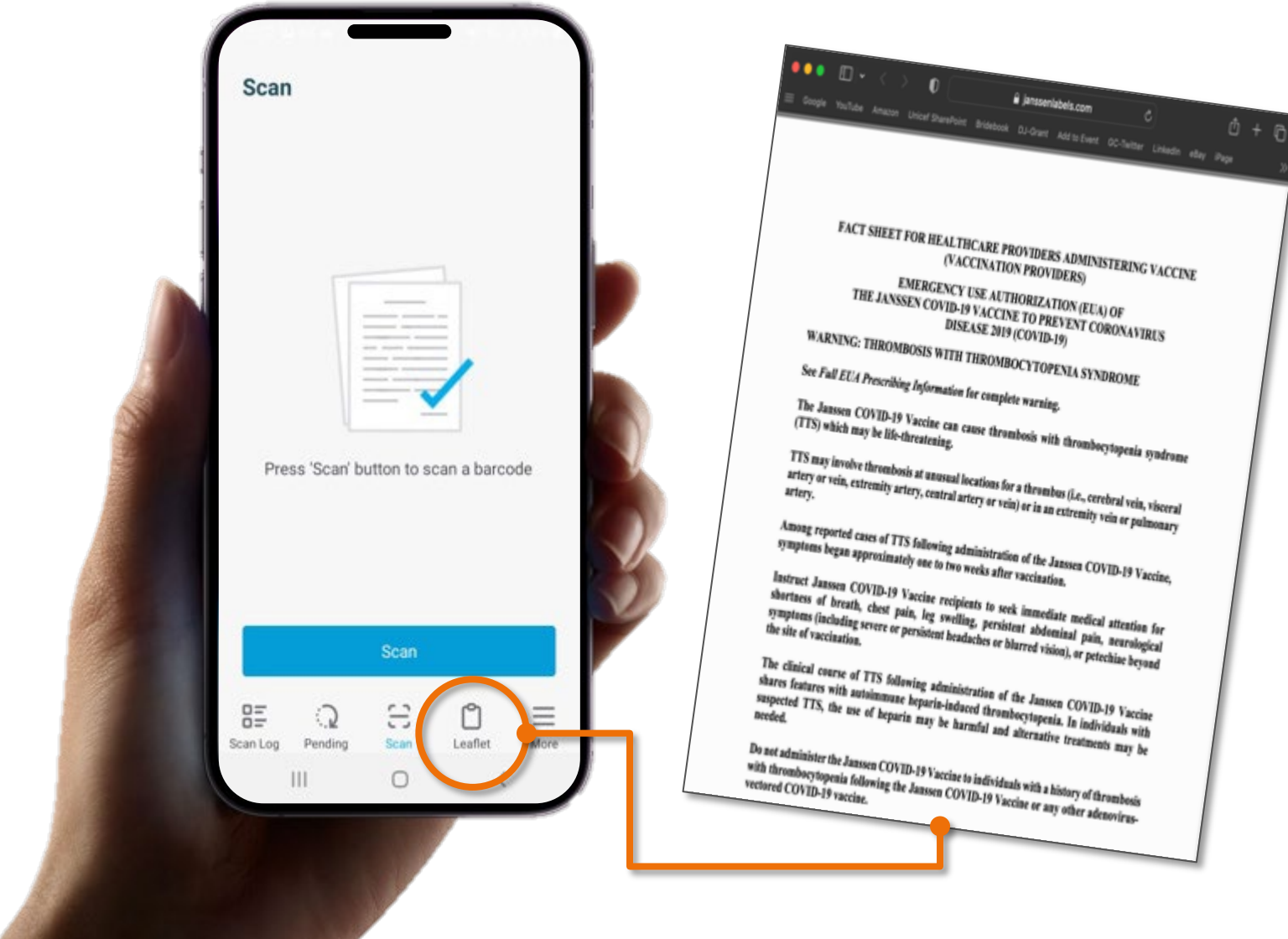
The TRVST Application – powerful supply chain surveillance



The TRVST application provides access to digital services and content

- Scans and verifies the data in the 2D DataMatrix.
- Can work offline and then upload verification requests once back online.
- The scan also captures the geo-location of the scan with a time and date.
- Available in French and English
- Verification responses can be country specific.
- We can make the app public or put behind passcode access.

Access to other digital content and services using the TRVST app



- The TRVST also uses GS1 Digital Link Standards to access electronic content using the DataMatrix
- The TRVST leverages the GS1 Digital Link standards and resolver services to connect to the e-leaflet.
- TRVST can resolve directly to the digital content or redirect to another resolver.
- In addition to verification and e-leaflets other service are provided such as the recall status.

Overview on Verification and Traceability Verification Systems journey till today

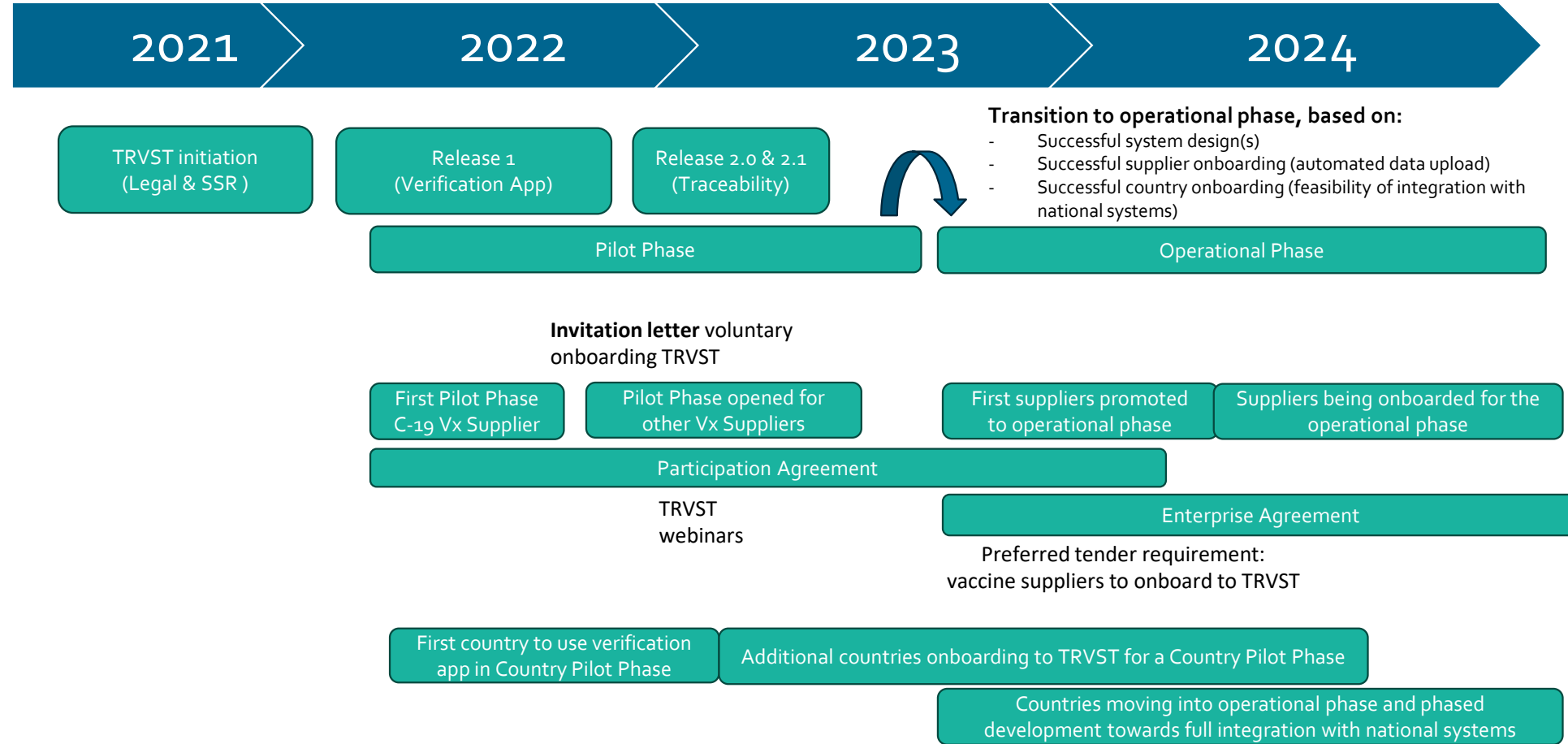
TRVST System & App

Supplier onboarding

- Pilot Phase
- Operational Phase

Country onboarding

- Pilot standalone App
- Operational Phase



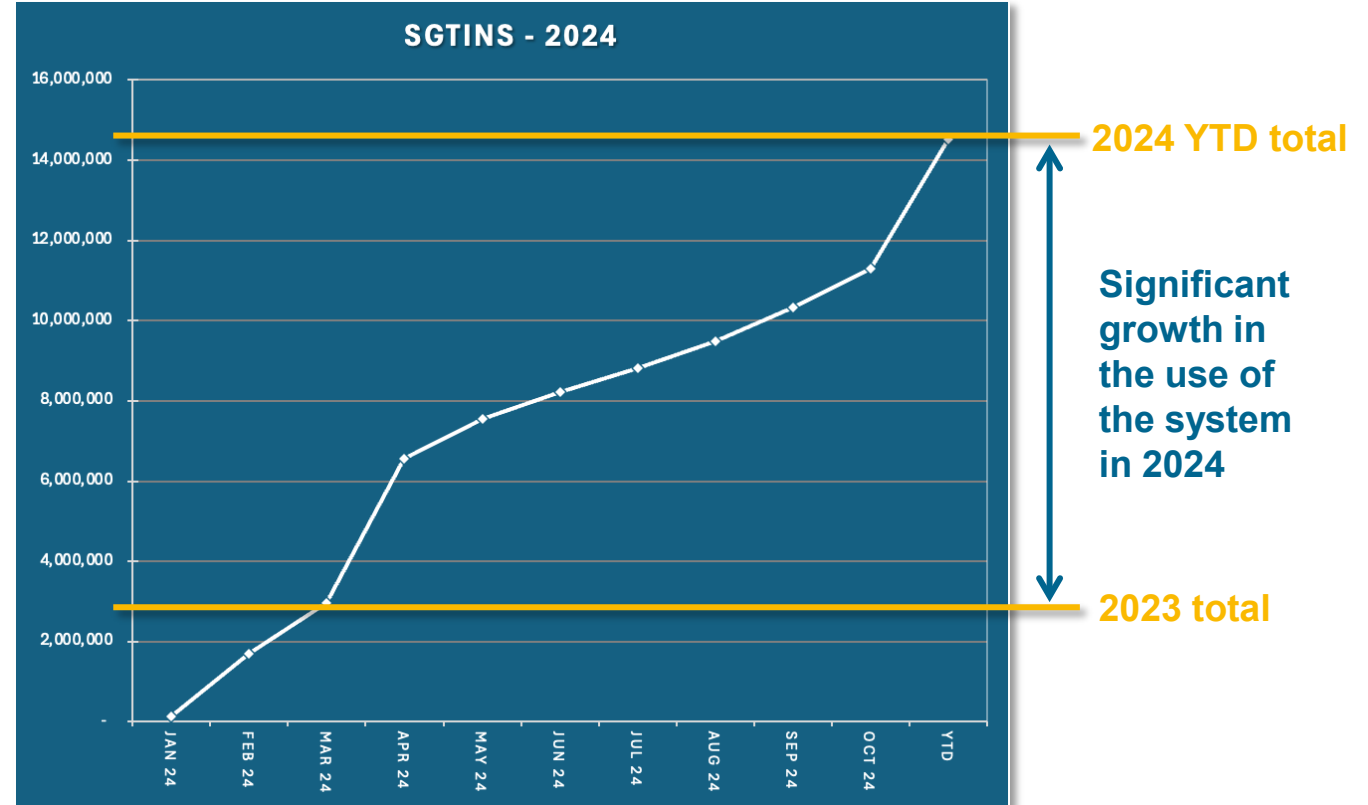
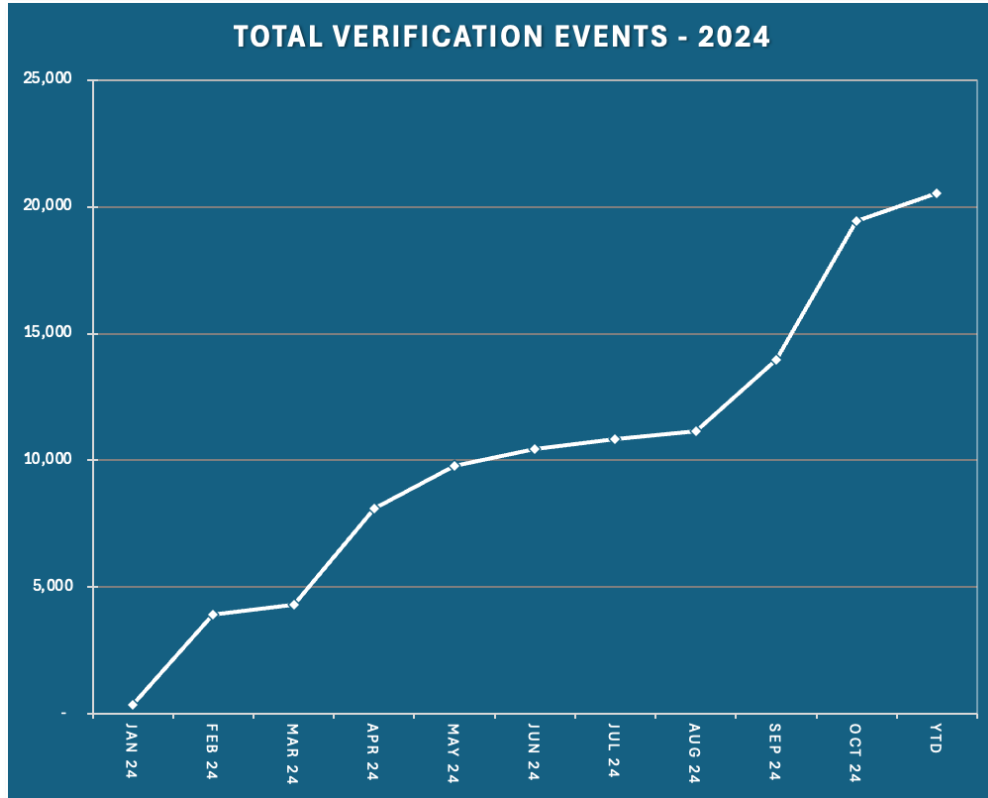
There has been significant progress with TRVST

- TRVST has received over **300,000 verifications** in the past 24 months.
 - This represents up to **75M doses** of authenticated vaccines.
 - Over **14M serialised packs** in the system
- **75% of the vaccines** procured by UNICEF are now able to use TRVST, we have commitment from suppliers to drive this up to **86%**.



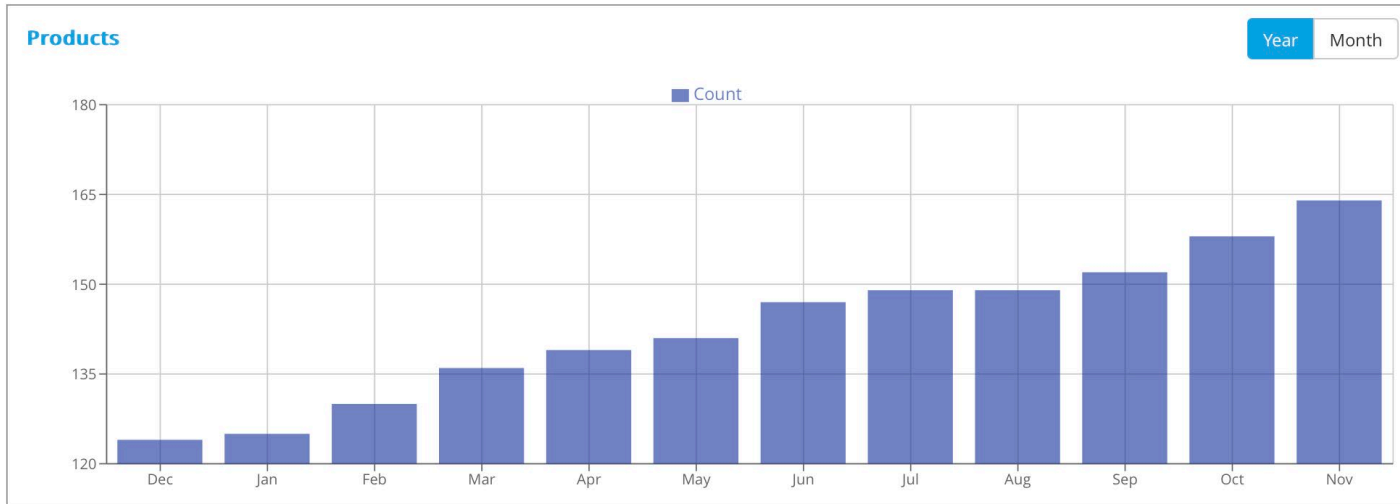
2025 will see further progress as we deploy to more products & countries

Based on 2024 YTD numbers

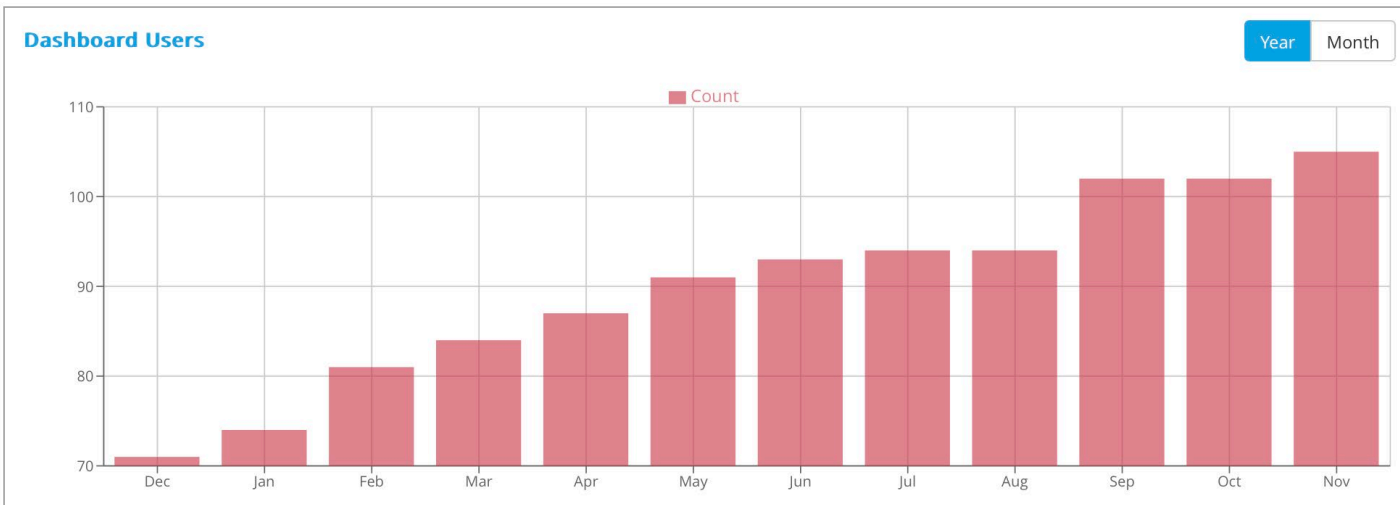


- We achieved a total of **2.7M** last year and we have over **14M** in the system this year a significant increase.

We also see steady growth in system usage

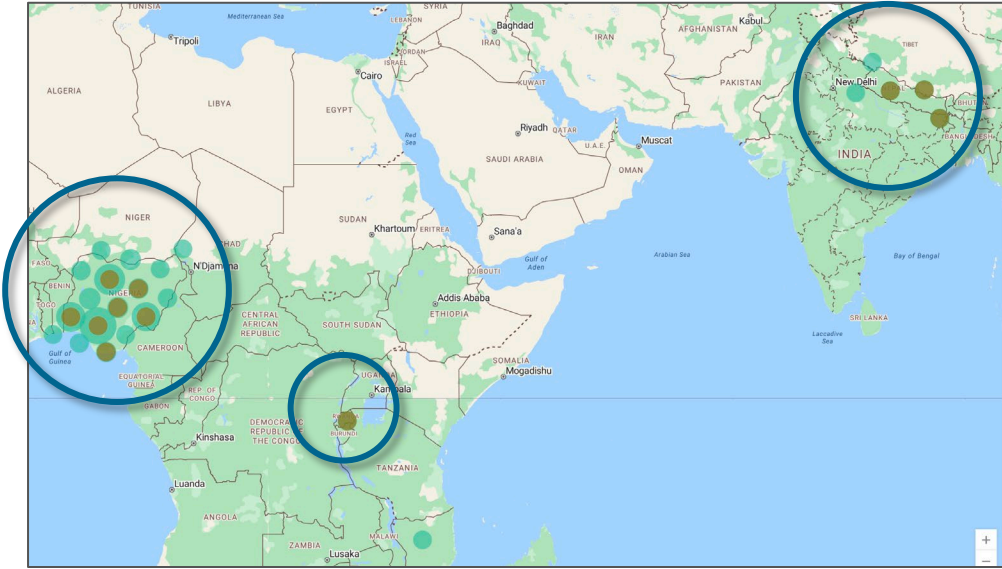


- Manufacturers have uploaded 164 vaccine products.



- System access has been granted to 105 users including manufacturers and country authorities.
- Each organisation can self-administer their users through their SPOC.

We are live in three countries with Botswana planned in Nov 2024



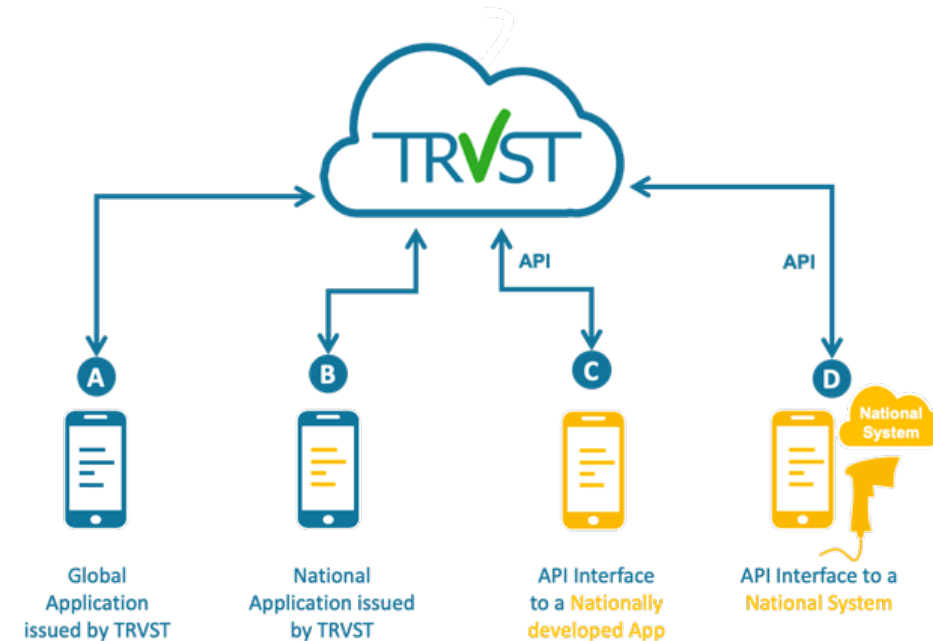
The reach of TRVST is also growing within the countries

Nigeria - Extensive coverage across the supply chain

Rwanda - Customs and central medical stores. Now moving towards Hospitals and other health facilities

Nepal - Customs, central medical store, provincial stores and district stores (7 provinces and almost 70 districts now live)

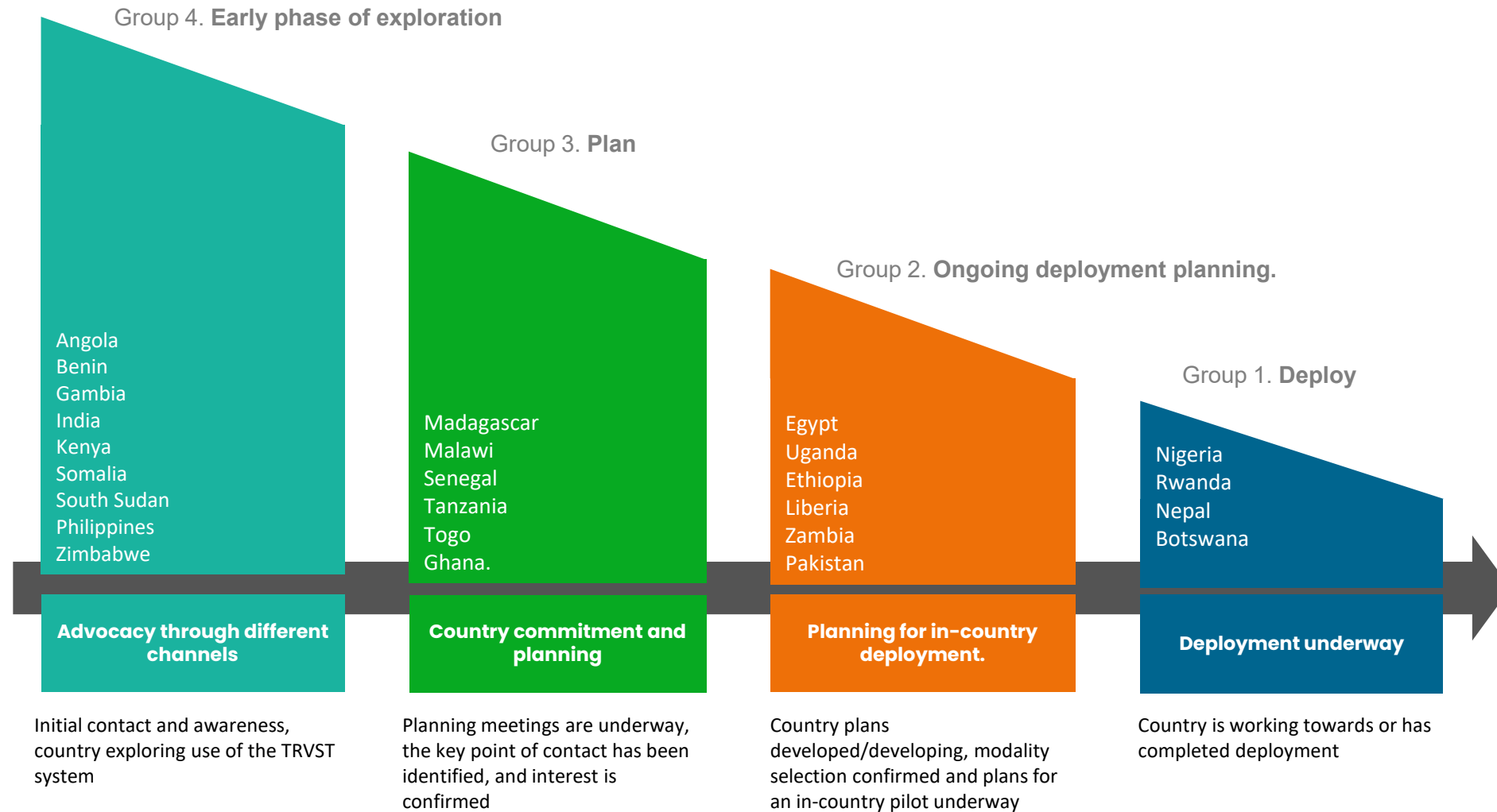
Nigeria – Modality D
Rwanda – Modality C
Nepal – Modality A
Botswana – Modality A





Look ahead to 2025

Increasing onboarding of countries

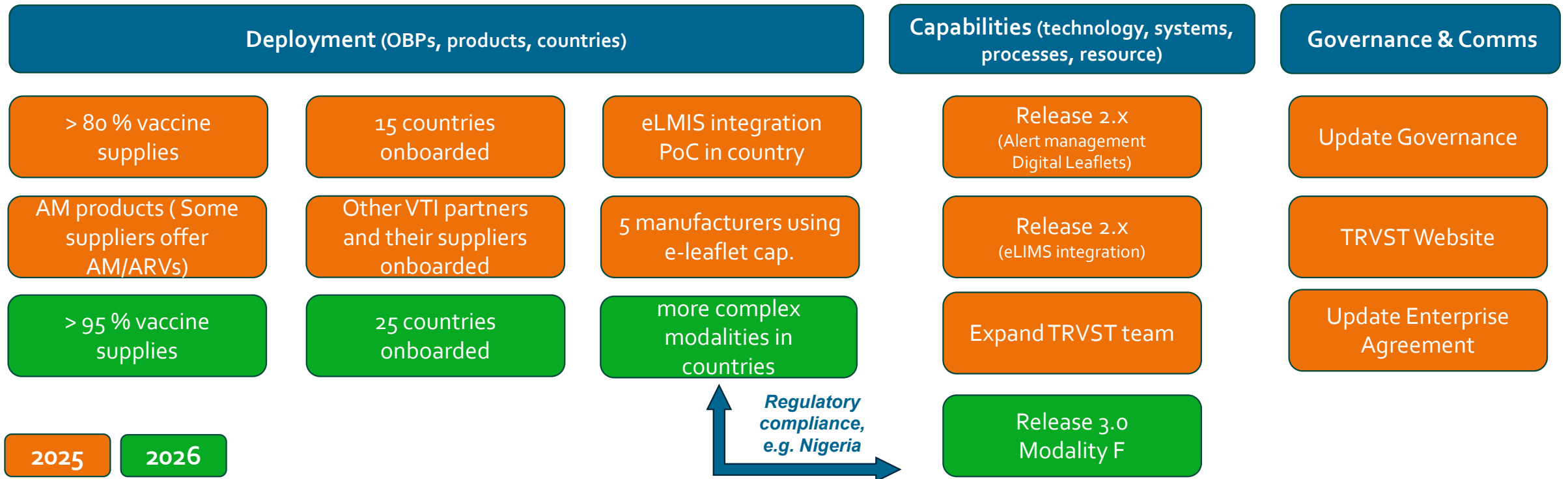


To allow us to accelerate country deployment, next year, we have taken three actions:

1. Put in place a dedicated country deployment resource.
2. Planning regional workshops for planning and training of countries.
3. Country deployment starter set.

Roadmap

- Based on successful pilot phase and shift to operations for vaccines and beyond we have developed a roadmap with following milestones and targets (selection):



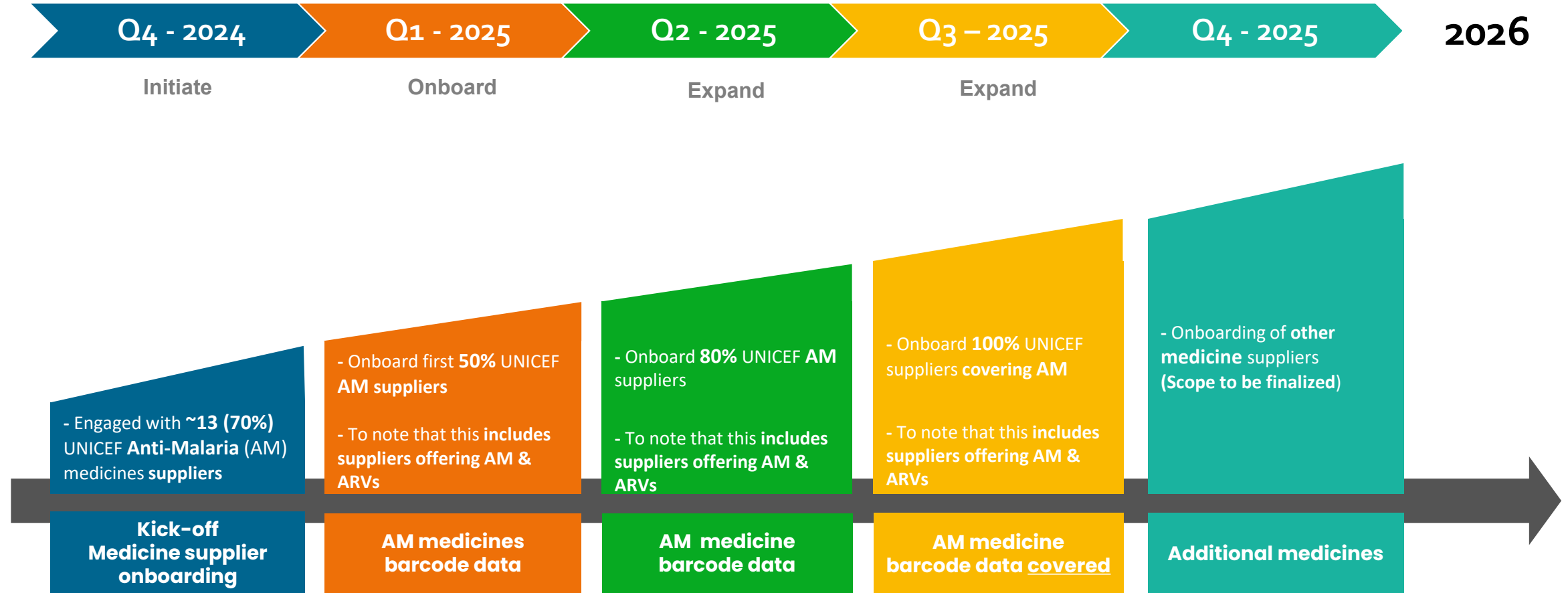
More use cases



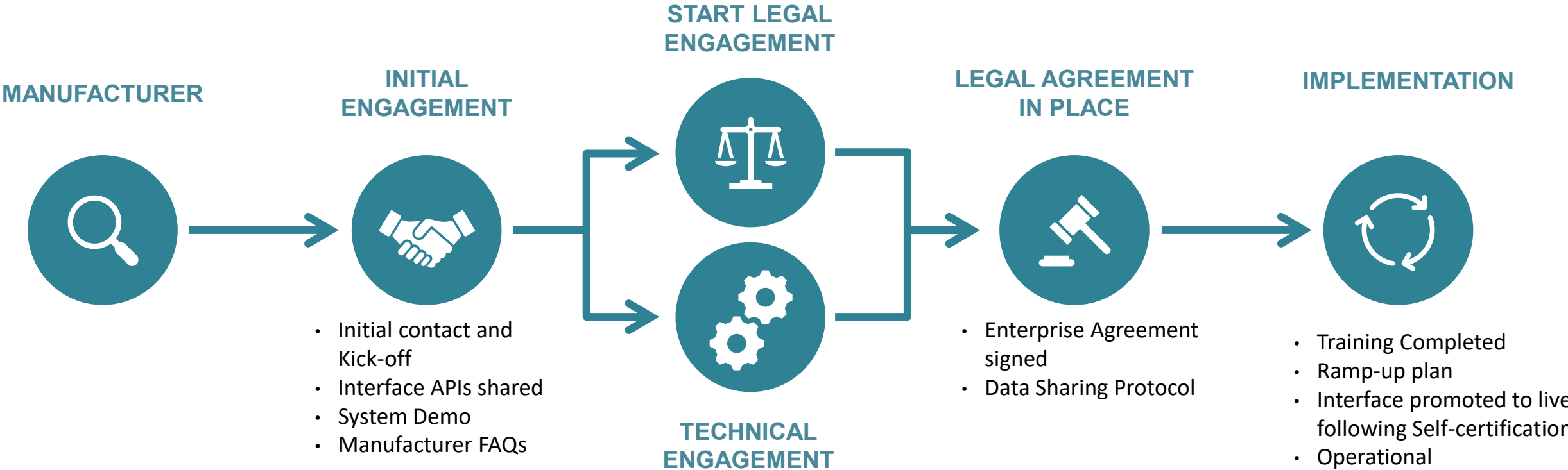
2022 - 24

Roadmap – Medicine Supplier Onboarding

Based on successful implementation of TRVST for UNICEF procured vaccines and vaccine supplier onboarding, UNICEF is now working on **fast-track onboarding** of UNICEF medicines suppliers:



Onboarding Process




Documentation including interface API, system demo and FAQs can be accessed on:
<https://login-ite.trvst4hp.org/Documents>

Project plan template

1	Manufacturer 1	Green		25%	16-Dec-22	
2	Initial contact and kick off complete	Green		100%	16-Dec-22	16-Dec-22
2	Statement of intent to participate	Green		100%	16-Dec-22	16-Dec-22
2	OBP Stakeholders identified and responsibilities discussed and agreed.	Green		75%	16-Dec-22	13-Feb-22
2	Initial product scope agreed	Green		75%	16-Dec-22	13-Feb-22
2	Interface APIs shared	Green		100%	16-Dec-22	16-Dec-22
2	Interface options presented and agreed (OBP or OBP1)	Green		100%	16-Dec-22	03-Feb-22
2	Supply chain mapped and upload triggers agreed	Green		75%	01-Jan-23	24-Feb-22
2	SPOC Identified and set up	Green		50%	16-Dec-22	24-Feb-22
2	Training completed	Green		0%		
2	Interface tested in ITE	Green		0%		
2	Interface tested in IQE	Green		0%		
2	Legal Agreements in place	Amber	Enterprise Agreement Required	0%		
2	Interface promoted to Production	Green		0%		
2	Product ramp up plan in place	Green		0%		
2	Product master data uploaded	Green		0%		
2	First serialised batch received	Green		0%		

Supplier Onboarding – TRVST document repository



Documentation can be accessed on:














<https://login-ite.trvst4hp.org/Documents>

Significant resources to help use TRVST

← Enterprise Agreement

← OBP API for interface

← Additional key reference materials for supplier / OBP onboarding

<div><div>TRVST</div><div>Traceability & Verification System for Health Products</div></div> <div>Documents Repository</div>			
Document Name	Description	Last Update	Download
Enterprise Agreement and Governance Documents	Legal agreement to use TRVST and the supporting governance documentation	12/06/2024	
OBP-E API Interface	Documentation covering the OBP-E API Interface used to upload data to TRVST	15/12/2023	
Frequently Asked Questions	Answers to questions that are frequently asked concerning TRVST	14/03/2023	
Dashboard Terms & Conditions	The Term of Use that TRVST Dashboard users must agree to before using the product	01/06/2022	
Mobile App Terms & Conditions	The Term of Use that TRVST verification users must agree to before using the product	01/06/2022	
OBP Training Material	Training Curriculum (Master Slide Deck) for On-Boarding Partners	26/02/2024	
OBP Training Material	Training Curriculum for Master Data	26/02/2024	
OBP Training Material	Training Curriculum for Operations Team	26/02/2024	
OBP Training Material	Training Curriculum for Brand Protection/Pharma-Vigilance Groups	26/02/2024	
Country Onboarding	Documentation covering the onboarding of new countries to Modality A&B	31/05/2023	
Country Authority Training Material	Training Curriculum for Country Authorities Modality A&B	25/07/2023	
Country Authority Training Material	Training Curriculum for Country Authorities Modality C	25/07/2023	
Country Authority Training Material	Training Curriculum for Country Authorities Modality D	25/07/2023	

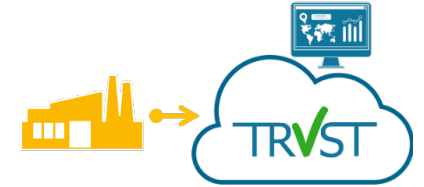
Next steps

- **Onboarding of UNICEF suppliers**

- Initial focus: antimalaria medicines (AM)
- Move towards firm requirement for onboarding to TRVST (LTAs / RFPs)
- Other medicines suppliers onboarding (To be communicated)



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- Anticipated dedicated **TRVST webinar** with **medicine suppliers** in 2025

- Beyond UNICEF - Expand onboarding of suppliers from **procuring countries** and other **agencies** in 2025

Thanks for your attention . . . any questions ?





Together we are helping prevent falsification and drive traceability

Contacts

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unicef 
for every child

THANK
YOU

