Workshop on Review, Update and Resource Mapping for the National Action Plan for Health Security

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1. Executive Summary

From June the 28th to July the 1st 2022, the National Action Plan for Health Security (NAPHS) review and update workshop was jointly conducted for the first time with Resource Mapping (REMAP) in Tunisia. This resulted in the creation of an updated NAPHS for 2022-2026 and visualization of the health security resource landscape in Tunisia.

The workshop involved national technical experts reviewing the Tunisia NAPHS, determining the status of implementation of the NAPHS activities, reviewing the costing of the activities, and adjusting/adding activities based on lessons learned from the COVID-19 pandemic, resulting in updated activities and costing through 2026. Participants further used the resource mapping (REMAP) tool and process developed by WHO to identify financial and technical support for health security in the country, as well as needs for support.

The workshop brought together over 30 participants including representatives from line ministries: Ministry of Health; Ministry of Industry, Mines and Energy; Ministry of Environment; Ministry of Interior; President's Office.

The workshop resulted in a revised costing of the country NAPHS to an estimated $24,567,801, adjusted significantly down from the original $45,275,501 costed in 2019. This reduced cost is a result of progress in NAPHS implementation, adjustment of activities, and revision of activity cost estimates. Participants work on determining the status of NAPHS activity implementation further resulted in the determination of 18 percent overall NAPHS implementation status, with detailed visualization of specific implementation status by indicator and technical area. The disruptions caused by the COVID-19 pandemic is the cause for the low implementation level with the health sector rightly focusing on response management at that time.

The resource mapping resulted in the mapping of more than $17.4 million in overall health security interventions in the country (not limited to the NAPHS). Often the partner projects mapped are not supporting the country's NAPHS and reflect the partners own priorities and areas of interest. This mapping facilitates evidenced-based dialogue between the countries and partners to inform greater alignment between country priorities and partner resources and the leveraging of resources for the national priorities through NAPHS.

The resource mapping in Tunisia found health security support focused in areas such as food safety, risk communication, antimicrobial resistance and points of entry. Major gaps were found in areas such as immunization where just $20, 000 in total health security investment was mapped as compared to more than $14.5 million needed for NAPHS implementation. Other large gaps were found in areas including biosafety and biosecurity, where $50,000 in total health security support was mapped compared to $900,000 needed for the NAPHS and radiation emergencies where $31,000 was mapped in comparison to $2 million necessary for NAPHS activities.

The REMAP tool and process was also used in Tunisia to identify human resource needs for the implementation of NAPHS, such as expert technical assistance in specialized areas. Through the resource mapping, more than 80 specific NAPHS activities were identified as in need of technical assistance for completion, with technical areas of particular need including national legislation, policy and financing,

antimicrobial resistance, biosafety and biosecurity, emergency response operations, real time surveillance, chemical events, radiation emergencies and others. The full listing, along with the details of health security resource support in the country, is detailed in the online REMAP dashboard that was built for Tunisia.

The REMAP tool and dashboard provides an online platform for visualizing NAPHS implementation in the country and for national focal points to use in the ongoing tracking and analysis of health security resources in Tunisia. The online REMAP tool, launched and piloted in 2022, is further being enhanced to facilitate Tunisia and other countries to engage in continuous tracking of domestic and external financial investments being made in specific NAPHS activities, as well as to update and monitor the overall health security resource landscape.

2. Introduction

Tunisia, officially the Republic of Tunisia, is the northernmost country in Africa. It is a part of the Maghreb region of North Africa, and is bordered by Algeria to the west and southwest, Libya to the southeast, and the Mediterranean Sea to the north and east, covering 163,610 km^2 (63,170 sq mi), with a population of 11 million.

The Republic of Tunisia was the 25th country globally and the 9th in the World Health Organization (WHO) Eastern Mediterranean Region to volunteer for a Joint External Evaluation (JEE) in 2016. Tunisia's substantive and ongoing commitment to implement IHR capacities was noted and commended by the JEE external team. The JEE team found that Tunisia had established capacities in all technical areas relevant for the International Health Regulations (IHR,2005) and has many excellent practices in place. They further emphasized that the county's health care system had shown remarkable resilience in providing necessary services to fight emerging and re-emerging diseases and other health security issues. However, the evaluators established that significant efforts are still needed in most IHR capacities.

Tunisia has a substantial legal and regulatory framework to support and enable the implementation of IHR but needs to identify gaps and corrective measures to accelerate this implementation. A national multisectoral commission was established in 2014 to coordinate IHR implementation. The country also has a technical platform to detect antimicrobial resistance pathogens. It was recommended by the JEE conducted in 2016 that the analytical capacity of the surveillance system and risk assessment for major zoonotic diseases, in both the human and animal health sectors be strengthened at the regional level. While zoonotic committees exist at national and regional level, information sharing and collaboration between both sectors were also recommended to be improved, especially outside crisis situations.

The development of NAPHS came as the next step in the continuum of efforts to meet the IHR capacities development requirements. Multi-sectoral participation was discussed and agreed between WHO-EMRO and Tunisia International Health Regulation Center on one side and MOH Tunisia and the IHR multi-sectoral committee containing all national IHR-bound authorities on the other side. Communication with all relevant sectors was facilitated by the IHR National Focal Point and the participation of relevant technical experts from each sector was confirmed for the planned workshop. Invitations were also extended to partners ahead of time, to ensure consensus on the outcomes of the plan and a view ahead to improve national health security in Tunisia. Participants made sure to address the interlink between relevant technical areas and the issue of strengthening coordination, cooperation and communication among key stakeholders, and reflect that in the planned activities.

A National Action Plan for Health Security (NAPHS) of the Republic of Tunisia was developed during a workshop that took place in La Marsa, Tunisia 22-24 April 2019. This plan was based off the Joint External Evaluation (JEE) executed 28 November to 2 December 2016 and the 19 areas in the JEE were used as a guideline to come up with indicators to bring Tunisia's national health system up to IHR standards. Under each of the 19 areas addressed by the JEE, specific activities were devised by a multi-sectoral group documenting the necessary steps to achieve these standards. Based on the NAPHS, cost of the overall implementation was also devised so that the country could properly plan for the next five years.

NAPHS implementation was affected by the COVID-19 pandemic and the need was identified to assess and update the NAPHS in 2022, including reviewing the activities, the status of implementation and costing, as well as examining partner support for health security in the country to determine areas that may be leveraged for NAPHS implementation.

From June the 28th to July 1st 2022, NAPHS review and REMAP workshops were jointly conducted in Tunisia for the first time. This is an important milestone for Tunisia as well as for WHO since both exercises are closely interrelated and it was essential that the health security resource landscape in Tunisia be considered in the context of the updated NAPHS.

The face to face workshop brought together over 30 participants including representatives from line ministries: Ministry of Health; Ministry of Industry, Mines and Energy; Ministry of Environment; Ministry of Interior; President's Office. Various government agencies were also present including : Direction for Pharmacy and Medicaments (Direction Pharmacie et Médicaments); General Direction of Veterinary Services (Direction Générale des services vétérinaires); Direction for basic healthcare (Direction Soin de Santé de Base); Pasteur Institute, National Agency for Products' Sanitary and Environmental Control (Agence nationale de contrôle sanitaire et environnemental des produits); National Observatory for New and emerging diseases (Observatoire national des maladies nouvelles et émergentes) ; Medical Biology Laboratory Unit (Unité des laboratoire de biologie médicale); Medical Pharmacy Direction (Direction pharmaceutique médicale); Direction for Hygiene and Environment Protection (Direction Hygiène du milieu et protection de l'environnement), and the National Center for Radioprotection (Centre national de radioprotection). Partners including, among others, UNFPA, UNICEF and IOM were also present during the resource mapping portion.

Working group discussions were the core of the workshop. During the REMAP portion of the workshop, participants were divided into two groups : one grouping categories of Prevent, Detect, Respond, and another one with the Other IHR-related Hazards and Points of Entry, and provided with two data sheets per core component. The groups used the resource mapping tool to identify the partners and resources working in support of those activities. Technical area leads and partners populated the sheets based on the standard instructions by selected facilitators (see workshop agenda in annex 2). Thematically linked technical areas were discussed with the relevant set of multi-sectoral stakeholders.

The workshop participants in the two working groups (Prevent, Detect, Respond and other IHR) were also asked to use the tool to update technical needs in NAPHS implementation based on the guidance of technical area experts.

3. Objectives

The workshop aimed to:

- Review and update activities of the current NAPHS. Provide a platform for monitoring the implementation of the NAPHS.

- Identifying specific technical needs for assistance in completing activities needed to strengthen health security.

- Provide government, partners, donors, agencies and other multisectoral stakeholders with better visibility of resources for health security to support building, maintaining and strengthening health security capacity

- Encourage collaboration and synergies through the harmonization of the efforts of the country, donors and partners in order to strengthen national capacities for prevention, detection and response as well as public health

4. Results from working session and key findings

Workshop participants work on determining the status of implementation in each of the country's NAPHS activities further resulted in development of details on the specific implementation status by indicator. The status of implementation was further visualized within the REMAP tool, including 18 percent total progress in NAPHS implementation and percentage of implementation within each of the 19 technical areas (see illustration below).
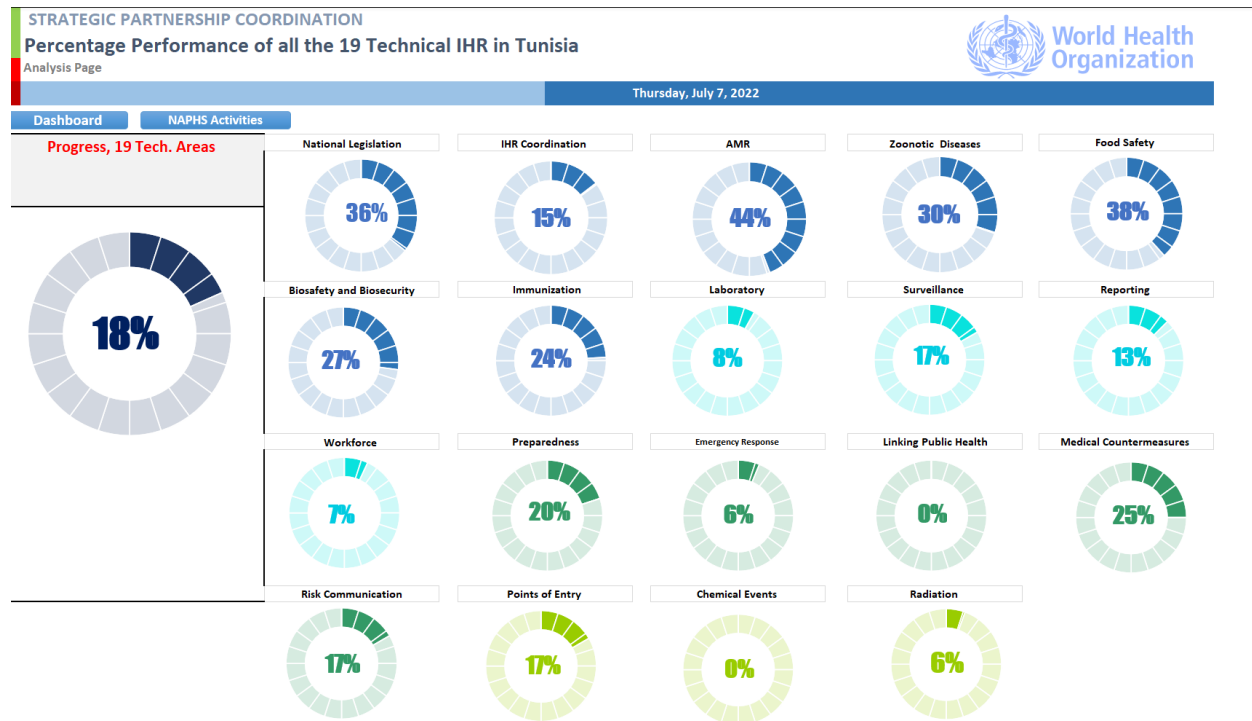

Figure 1: NAPHS implementation as visualized in the REMAP tool

Working groups reviewed, the implementation status of the current NAPHS activities, then the plan prioritized and updated accordingly with budget estimate. The technical groups updated the activities as per lessons learned from COVID-19 pandemic (IARs) and through discussion with relevant partners.

The NAPHS review and update portion of the workshop resulted in a revised costing of the country NAPHS to an estimated $24,567,801 for 2022-2026, adjusted significantly down from the original $45,275,501 of the 2019 costing because of progress in NAPHS implementation, adjustment of activities, and revision of activity cost estimates.

Technical Area	Original 5 year cost	New estimated cost
1. National Legislation and Financing	1,642,000	43,800
2. IHR Coordination and National IHR Focal Point Functions	325,500	298,500
3. Antimicrobial Resistance (AMR)	3,250,500	750,000
4. Zoonotic events and the human–animal interface	2,305,500	290,000
5. Food safety	555,000	657,000
6. Biosafety and biosecurity	1,021,000	930,000
7. Immunization	15,194,000	14,616,000
8. National laboratory system	1,492,000	1,435,000
9. Real-time surveillance	5,877,500	230,000
10. Reporting	79,000	90,000
11. Human resources/Workforce development	1,734,500	132,000
12. Preparedness	167,000	140,000
13. Emergency Response Operations	769,501	518,501
14. Linking public health and security authorities	6,176,000	982,000
15. Medical countermeasures and personnel deployment	2,000	3,000
16. Risk communication	769,500	281,000
17. Points of entry (PoE)	659,000	129,000
18. Chemical events	1,188,000	1,040,000
19. Radiation emergencies	2,068,000	2,002,000
Total	**45,275,501**	**24,567,801**

The resource mapping resulted in the mapping of more than $17.4 million in overall health security interventions in the country (**not limited to the NAPHS**). Often the partner projects mapped are not supporting the country's NAPHS and reflect the partners own priorities and areas of interest. This mapping facilitates evidenced-based dialogue between the countries and partners to inform greater alignment between country priorities and partner resources and the leveraging of resources for the national priorities through NAPHS.

The resource mapping in Tunisia found health security support heavily focused in areas such as food safety and risk communication, both of which were mapped as having support for projects that are beyond the scope of the country's NAPHS, while major gaps were found in areas such as immunization where just $20, 000 in total health security investment was mapped as compared to more than $14.5 million needed for NAPHS implementation. Other gaps were found in areas such as biosafety and biosecurity, where $50,000 in total health security support was mapped compared to $900,000 needed for the NAPHS and radiation emergencies where $31,000 was mapped in comparison to $2 million necessary for NAPHS activities.

World Health Organization

The number of activities and amount mapped for all sources of health security support (not limited to NAPHS) provided in Tunisia $ 17,497,755

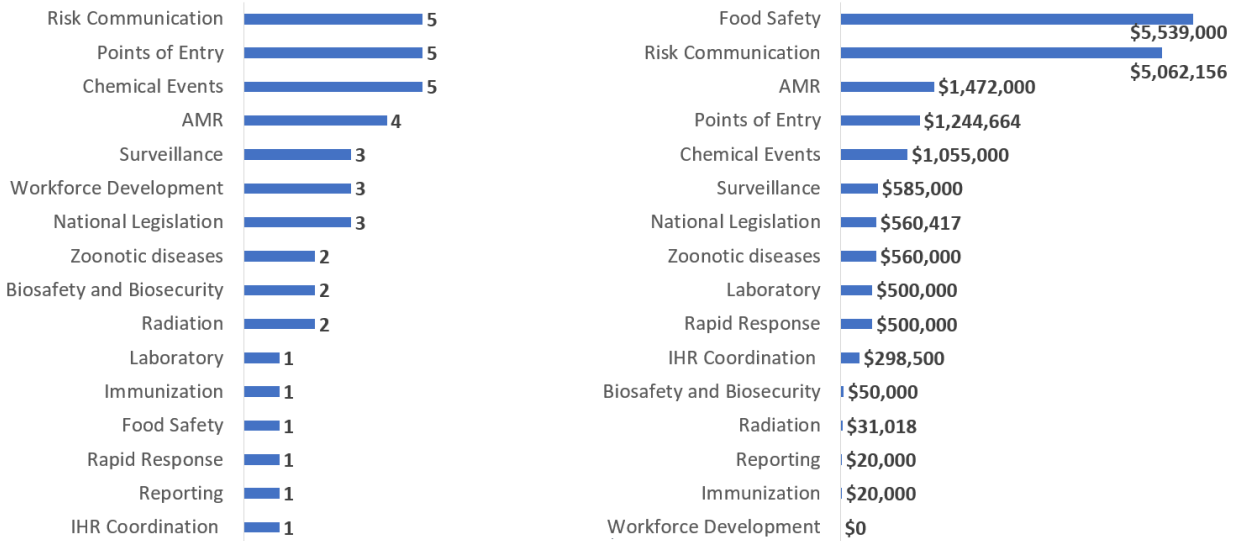| Technical Area	Number		Technical Area	Amount
Risk Communication	5		Food Safety	$5,539,000
Points of Entry	5		Risk Communication	$5,062,156
Chemical Events	5		AMR	$1,472,000
AMR	4		Points of Entry	$1,244,664
Surveillance	3		Chemical Events	$1,055,000
Workforce Development	3		Surveillance	$585,000
National Legislation	3		National Legislation	$560,417
Zoonotic diseases	2		Zoonotic diseases	$560,000
Biosafety and Biosecurity	2		Laboratory	$500,000
Radiation	2		Rapid Response	$500,000
Laboratory	1		IHR Coordination	$298,500
Immunization	1		Biosafety and Biosecurity	$50,000
Food Safety	1		Radiation	$31,018
Rapid Response	1		Reporting	$20,000
Reporting	1		Immunization	$20,000
IHR Coordination	1		Workforce Development	$0

Figure 2: Total Health Security Investment mapped by technical area

The data was further used to define which partners were supporting health security in Tunisia and to what degree, including substantial investments from the German Global Health Protection Programme, FAO and UNICEF.
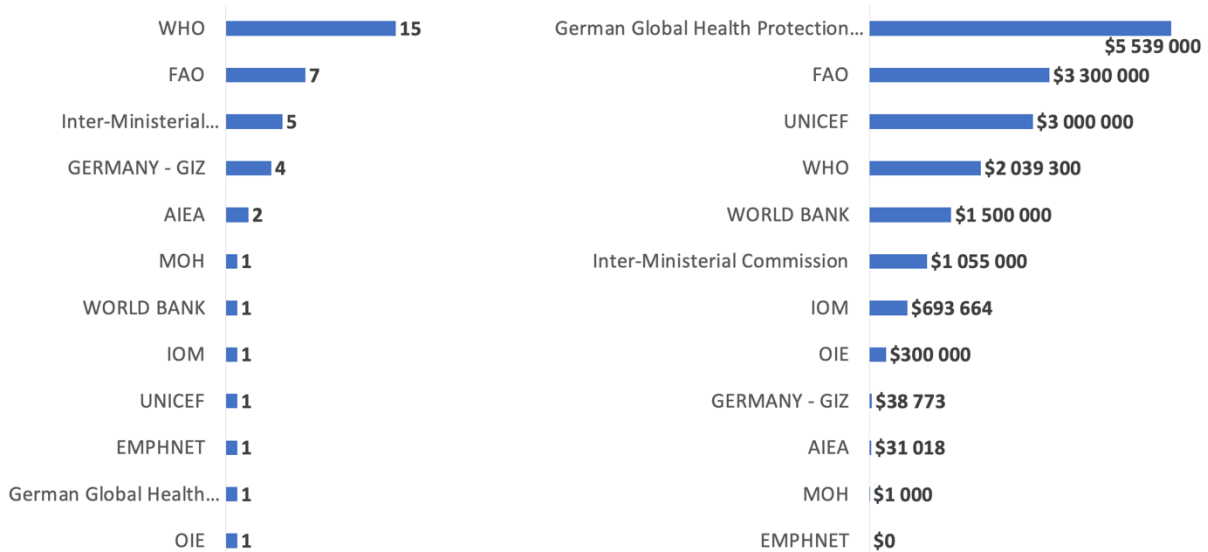
Partner	Number		Partner	Amount
WHO	15		German Global Health Protection…	$5 539 000
FAO	7		FAO	$3 300 000
Inter-Ministerial…	5		UNICEF	$3 000 000
GERMANY - GIZ	4		WHO	$2 039 300
AIEA	2		WORLD BANK	$1 500 000
MOH	1		Inter-Ministerial Commission	$1 055 000
WORLD BANK	1		IOM	$693 664
IOM	1		OIE	$300 000
UNICEF	1		GERMANY - GIZ	$38 773
EMPHNET	1		AIEA	$31 018
German Global Health…	1		MOH	$1 000
OIE	1		EMPHNET	$0

Figure 4: Number and amount of health security interventions mapped by partner/government/ donors

More detailed information on the details of partner and government health security support mapped in the country are included in the online REMAP dashboard, including the details of activities, years of the project, governorates being supported, amount of the investment, implementing agency (if any), whether the activity represents financial or technical assistance, and other relevant details. The online

REMAP tool, launched and piloted in 2022, is further being enhanced to facilitate Tunisia and other countries to engage in continuous tracking of domestic and external financial investments being made in specific NAPHS activities, as well as to update and monitor the overall health security resource landscape.

Tunisia is encouraged to use the data for an evidenced-based dialogue with partners on how these existing health security investments can be leveraged to support the implementation of national priorities as reflected in the country's NAPHS, as well as to promote the allocation and reallocation of resources in areas of particular need. The data is also encouraged to be shared, including through WHO, with other partners who are not currently working in the country to better understand areas of need and how they might support Tunisia.
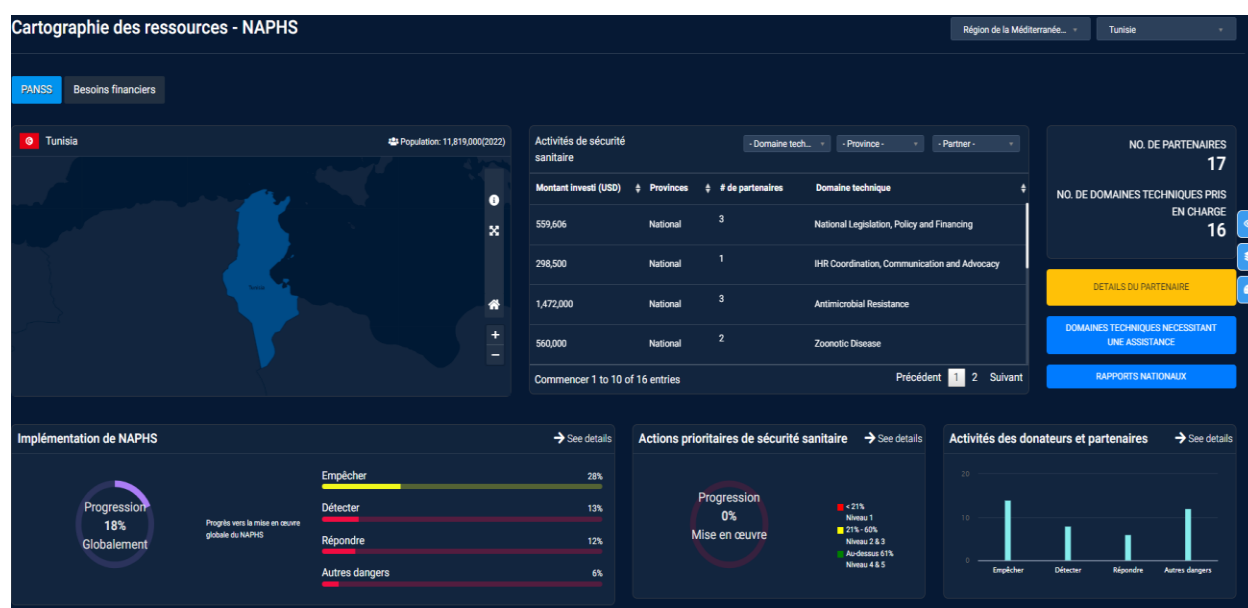

Figure 5: Online REMAP dashboard built for Tunisia

The working groups further used the REMAP tool and process to map human resource needs for implementation of the specific NAPHS activities. The national experts identified whether outside technical assistance was needed to complete each NAPHS activity and, if so, what specific assistance was required. This portion of the exercise is designed to support Tunisia in the identification and matching of technical partners that can support.

Through REMAP, more than 80 specific NAPHS activities were identified as in need of technical assistance for completion, with technical areas of particular need including national legislation, policy and financing, antimicrobial resistance, biosafety and biosecurity, emergency response operations, real time surveillance, chemical events, radiation emergencies and others. Examples of these specific activities are shown below:

- SOP development, field worker training and SIMEX testing for public health contingency plan at PoEs
- Design and implementation of joint simulation exercises between Points of Entry

- Development of National Inter-ministerial Commission on Chemical Events
- Establishment National Radiological Emergency Plan (NREP) and simulation exercise for the plan
- Road map for the development and review of legislation/regulations from each sector
- Evaluation of the national vaccine access and delivery system
- To conduct risk assessment on radiological hazards
- Evaluation of AMR Communication Materials
- Evaluation of completeness/timeliness for disease notification for priority zoonotic diseases
- Develop national strategy, action plan and simulation exercise for biosafety/ biosecurity
- Training on event-based surveillance system at national and subnational levels
- Needs assessment and analysis of multidisciplinary human resources to implement IHR
- SOP development, field worker training and SIMEX testing for public health contingency plan at PoEs

The full list of activities identified in need of technical support is included in the online REMAP tool, which country focal points will access and can update. Identification of such technical needs is designed to be used to inform and mobilize country requests for partner support, including through the Global Sustainable Preparedness Network (GSPN), which WHO is establishing as a network of Member States, multisectoral partners, public health institutions, international organizations and others to facilitate the provision of technical assistance to countries.

5. Next Steps

- MOH and WCO to launch the updated NAPHS.

- WHO to provide the assistance on the addressed technical areas.

- WHO to provide access to designated national focal points to the password-protected online Resource Mapping (REMAP) tool for Tunisia

- WHO to provide Tunisia with guidance in updating data in the REMAP tool (including user manual) and any necessary support in continuing use of the tool.

- Tunisia recommended to use the REMAP tool to track and monitor the health security resource landscape in the country and visualize NAPHS implementation, using the resource mapping data for partner coordination and informing country planning for the mobilization of financial and technical resources

- The REMAP data will be validated and published on the WHO Strategic Partnership Portal (SPH Portal), which will be used for information sharing and as a platform for collaboration and advocacy to advance the implementation of the NAPHS of Tunisia. https: //extranet.who.int/sph

6. Annexes

Annex 1: Workshop Agenda

Proposed Agenda

28 June – 1 July 2022

Day One: 28 June 2022	
8:30 - 9:00	**Registration**
9:00 - 9:30	**Opening Remarks** - **Dr Ibrahim EL-Ziq, WHO Representative Tunisia** - ***(TBD)* MoH**
	Introduction of the agenda, objectives of the exercise and the participants *Dr Amgad Elkholy, Team Lead IHR Assessment, Monitoring and Evaluation, , Country Health Emergency Preparedness & IHR, EMRO*
9:30 – 10:00	**Introduction NAPHS Tunisia Development, challenges, and recommendation** *Dr Kaouther Harabech, National IHR focal Point, Tunisia*
10:00 – 10:30	**NAPHS tools for update and monitoring: Overview and methodology, and introduction to the group work** *Mr Denis Charles, Consultant, Country Capacity for IHR, HQ*
10:30 – 11:00	*Coffee Break*
11:00 – 13:00	**Group Work (1): Participants will be divided in to 3 groups to review and update the NAPHS.** **Group 1:** *Facilitator: Dr Mahgoub Hamid, Technical officer, Country Health Emergency Preparedness & IHR, EMRO and Mr Denis Charles* - **National legislation, policy, and financing** - **IHR coordination, communication, and advocacy** - **Points of entry** - **Chemical events** - **Radiation emergencies**

	Group 2: *Facilitator: Dr Mohamed Elhakim, Technical officer, Country Health Emergency Preparedness & IHR, EMRO and Dr Latifa Arfaoui, National Professional Officer, Emergency Prep & Operations, WCO Tunisia* - **Antimicrobial Resistance** - **Zoonotic Disease** - **Food safety** **Group 3:** *Facilitator: Dr Amgad Elkholy and Mr Sean Cockerham, Technical officer, Multisectoral Engagement for Health Security, HQ* - **Biosafety And Biosecurity** - **National Laboratory System**
13:00 – 14:00	*Lunch Break*
14:00 – 15:00	**Continuation: Group work: Prevent & POE and Other related IHR hazards groups. Update the status of the National action plan implementation**
15:00 – 16:30	**Plenary Discussion (1): A short presentation from each group followed by discussion to get consensus on the proposed activities under each technical area.**
Day Two: 29 June 2022	
09:00 – 10:30	**Group work (2): During the group work the status of the NAPHS implementation will be updated and new activities will be developed when needed.** **Group 1:** *Facilitator: Dr Amgad Elkholy and Mr Sean Cockerham* - **Real time Surveillance** - **Reporting** - **Immunization** - **Risk Communication** **Group 2:** *Facilitator: Dr Mohamed Elhakim and Dr Latifa Arfaoui* - **Workforce development** - **Preparedness** - **Emergency Response operations** **Group 3:** *Facilitator: Dr Mahgoub Hamid and Mr Denis Charles* - **Linking public health and security authority**

	- Medical countermeasures and personnel deployment.
10:30 - 11:00	*Coffee Break*
11:00 – 13:00	**Group Work Cont'd**
13:00 – 14:00	*Lunch Break*
14:00 – 16:30	**Plenary Discussion (2): A short presentation from each group followed by discussion to get consensus on the proposed activities under each technical area.**

Day Three: 30 June 2022	
09:00 – 10:00	**Presentation of the updated NAPHS & Plenary Discussion (3): Discuss the compiled NAPHS, participants to provide their feed backs** *Mr Denis Charles*
10:00 - 10:30	*Coffee Break*
10:30 – 11:00	**Introduction of Resource Mapping Tool and Process & introduction to the working group session** *Mr Sean Cockerham*

11:00 – 13:00	**Group Work (3):** *Participants will be divided up into four groups (Prevent, Detect, Respond and Other IHR) based on their expertise to complete the resource mapping data input sheets identifying the partner and government health security activities at national and sub national level for each of the technical areas.*
	Facilitated by Mr Sean Cockerham and All Facilitators
	PREVENT-
	• **National legislation, policy, and financing**
	• **IHR coordination, communication, and advocacy**
	• **Antimicrobial resistance**
	• **Zoonotic disease**
	• **Food safety**
	• **Biosafety and biosecurity**
	• **Immunization**
	DETECT
	• **National Laboratory System**
	• **Real Time Surveillance**
	• **Reporting**
	• **Human Resources**
	RESPOND: facilitated by
	• **Emergency preparedness**
	• **Emergency response operations**
	• **Linking public health and security authorities**
	• **Medical countermeasures and personnel deployment**
	• **Risk communication**

Other IHR all Hazard capacity: Facilitated by

- **Points of Entry**

- **Chemical Events**

- **Radiation Emergencies**

13:00 – 14:00	*Lunch Break*
14:00 – 17:00	**Group Work Cont'd**
Day Four: 1 July 2022	
09:00 – 10:30	**Group Work Continued** *Workshop participants will continue, working in the four groups (Prevent, Detect, Respond and Other IHR)*
10:30 - 11:00	*Coffee Break*

11:00 – 13:00	**Group Work Continued** *Workshop participants will continue, working in the four groups (Prevent, Detect, Respond and Other IHR)*
13:00 – 14:00	*Lunch Break*
14:00 – 15:00	**Group Work Continued** *Workshop participants will continue, working in the four groups (Prevent, Detect, Respond and Other IHR)*
15:00 – 16:00	**Results of Group Work Discussion** **The facilitator and rapporteur of each group will summarize the results of their group discussion**
16:00- 17:00	**Closing Remarks** - **WHO** - **MoH**