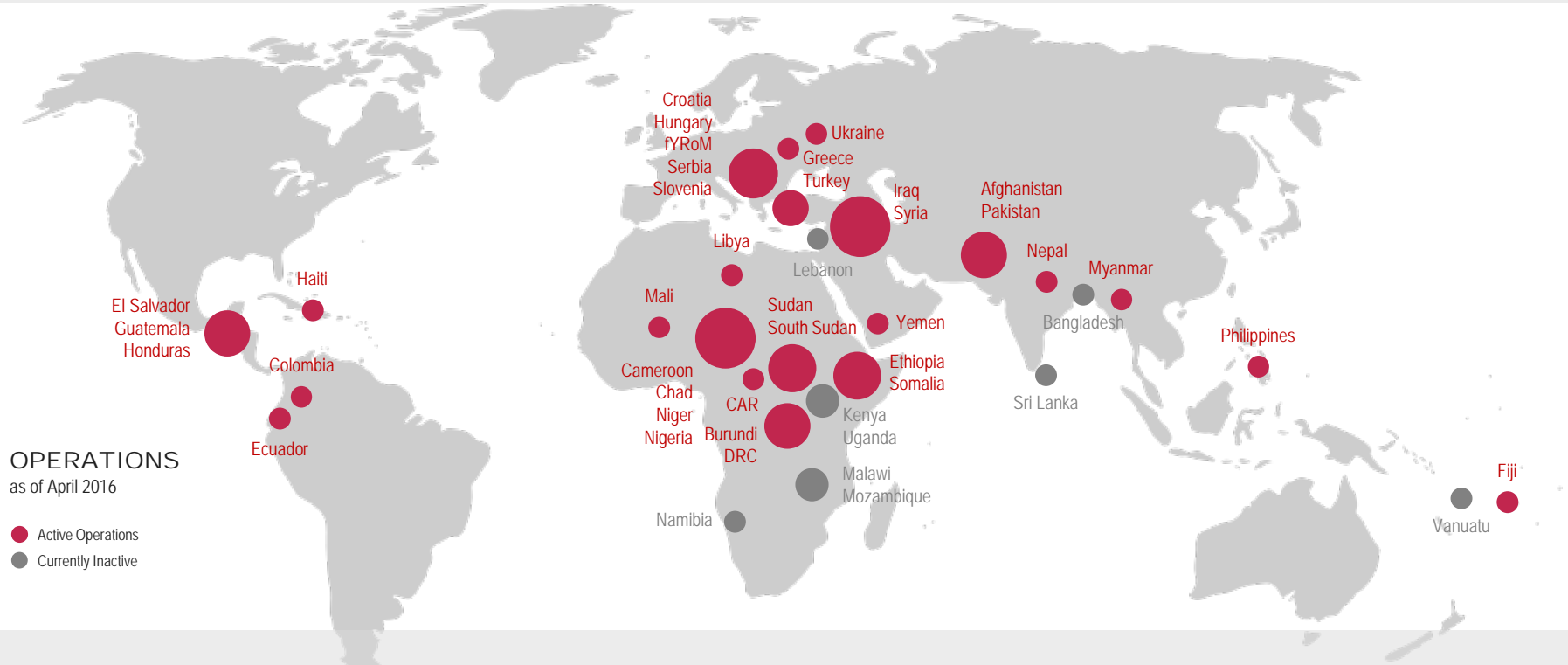


# DTM OPS OVERVIEW



regular

reporting and data collection  
in 34 countries

14 million

individuals tracked  
between 2014 and 2015

2,700

data collectors in the field  
23% female

159

technical experts in the field  
between 2014 and 2015

40 countries

in which the DTM has been active  
since 2004 to 2016

Displacement Tracking Matrix (DTM) – information and operations system to track and monitor population mobility. Designed to regularly capture, process and disseminate information that provides a better understanding of the movements and evolving needs of displaced populations, whether on site or en-route.

# COUNTRIES AND DISPLACEMENT CASELOAD COVERAGE (survey results July 2016)

Burundi	41,423 indiv.	32%	Nepal	21,315 indiv.	32%
Cameroon	238,675 indiv.	100%	Nigeria	2,066,783 indiv.	100%
Central African Republic	155,839 indiv.	63%	Somalia	430,062 indiv.	50%
Chad	9,187 indiv.	76%	South Sudan	347,772 indiv.	45%
DR of Congo	191,774 indiv.	30%	Sudan	164,670 indiv.	n/a
Ecuador	20,278 indiv.	29%	Syria	5,065,350 indiv.	94%
Ethiopia	639,262 indiv.	100%	Yemen	865,836 indiv.	35%
Fiji	30,445 indiv.	100%			
Haiti	61,302 indiv.	100%			
Iraq	3,320,274 indiv.	100%			
Libya	425,250 indiv.	76%			
Mali	37,801 indiv.	100%			

\* Calculated against IDMC Displacement Figures or available figures from other sources. Covering only countries implementing mobility tracking and registration components of DTM, excluding flow monitoring and surveys.

## Nigeria

Tracking and registration (biometric)  
100% tracking

## Iraq

Tracking and alerts  
100%

## Haiti

Still happening  
since 2010

## Syria

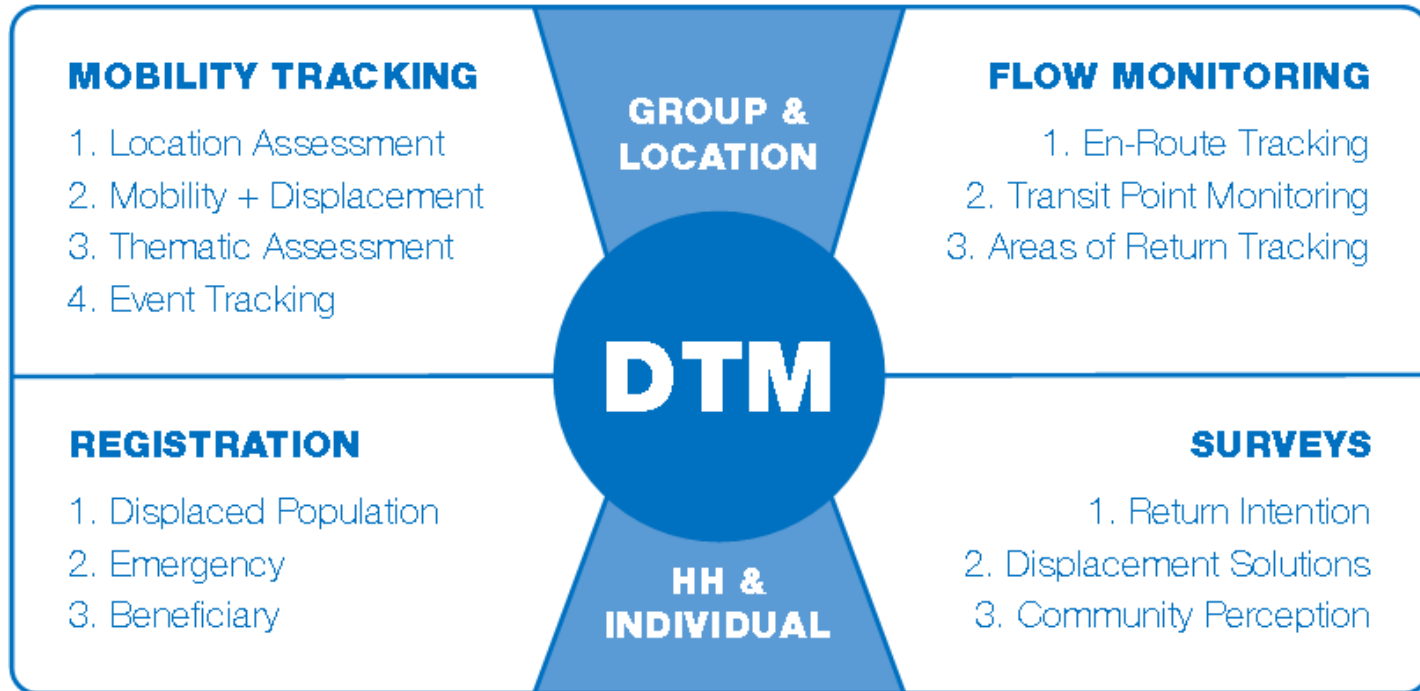
Tracking and alerts  
94%

## Libya

Tracking  
76% since 2004 to 2016

Displacement Tracking Matrix (DTM) – information and operations system to track and monitor population mobility. Designed to regularly capture, process and disseminate information that provides a better understanding of the movements and evolving needs of displaced populations, whether on site or en-route.

# DTM COMPONENTS



14,486

key informants  
in 2016

4,991

locations covered  
in 2016

5,708

from total locations  
in 2016

DTM components: Mobility tracking; Flow monitoring; Registrations; Surveys; Incident tracking.

Population: Mobile population groups, including IDPs and Migrants

Movement categories: spontaneous, organized; cross border, internal; return; resettlement

Locations: High mobility, displacement sites, camps, transit points, place of origin, place of return or resettlement

# DISPLACEMENT TRACKING MATRIX - DTM

Technology and Innovation

## DATA MANAGEMENT & REPOSITORY

- Central Data Warehouse and global data consolidation
- DTM Data Dictionary
- Mobile Data Collection Tools
- Biometric Data Collection
- Unmanned Aerial Vehicles



## OPERATIONAL PROCESSES

- Protection-enhanced DTM
- Process Mapping
- Geo-enabled Incident Management System
- Data Protection and Ethical Data Use in Humanitarian Operations
- Linking to other humanitarian and development sectors



## ANALYSIS & PRODUCTS

- Geoportal and Spatial Data Infrastructure
- Visual Analytics and Predictive Analytics
- Mobile app development for integrated data collection and automated reporting
- Social media analytics



**Innovation** is at the core of the global development. IOM has been engaged in partnerships including with private sectors companies to further enhance DTM



ESRI: GIS System Dev., Spatial Data Infrastructure



SAS: Visual Analytics, Predictive Analytics



Deloitte: Process Mapping, DTM Data Dictionary



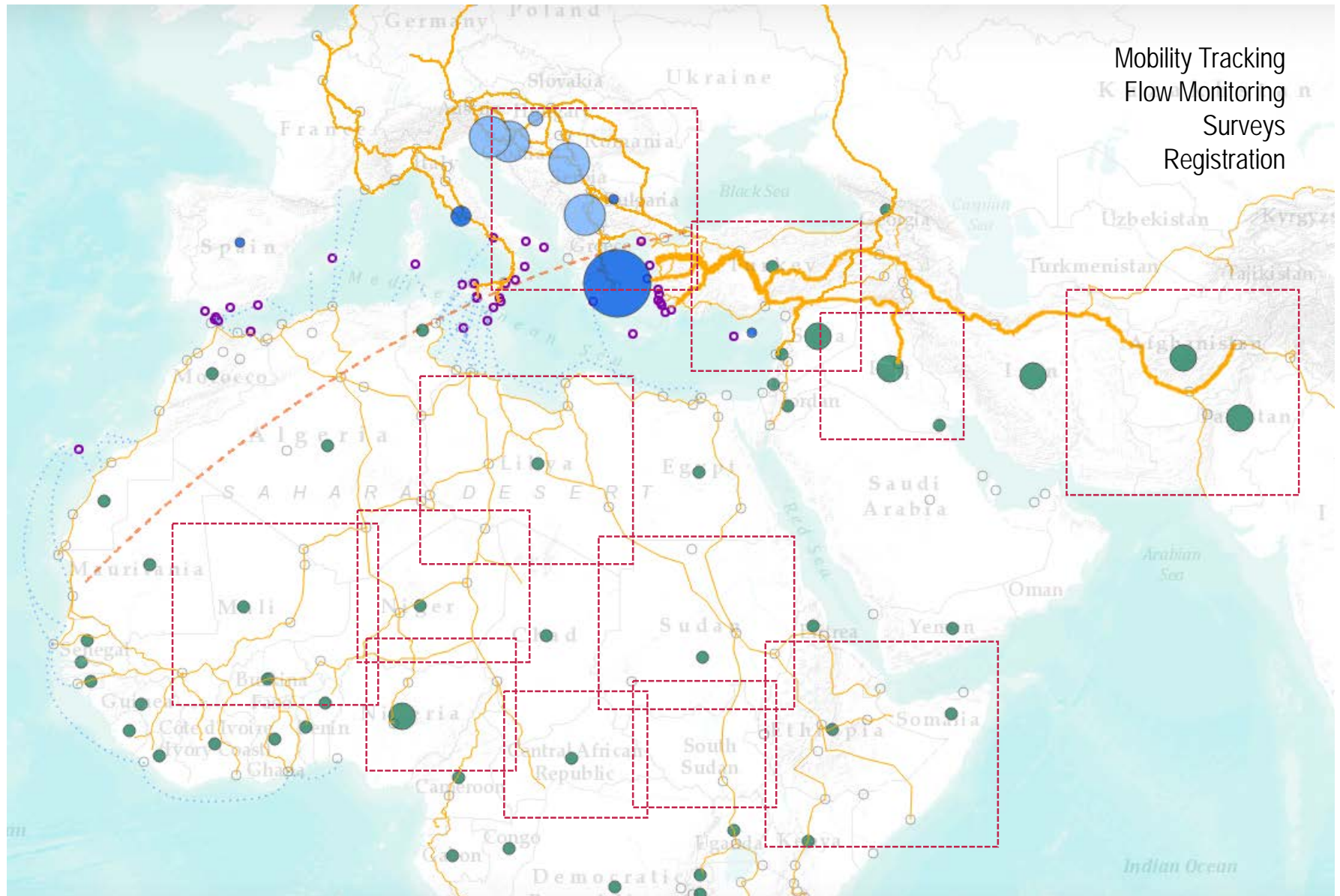
IDMC: Annual Global Displacement Report



and others at countries, regionals, and global level

# MIGRATION FLOWS to EUROPE

Linking up regional DTM implementation



# LAKE CHAD BASIN CRISIS

DTM Nigeria • DTM Cameroon • DTM Chad

## Nigeria

**2,241,484** IDPs  
Source: DTM (Camps & Host Communities)

**229,082** Beneficiaries Assisted

IOM is lead of CCCM WG and Emergency Shelter/NFI WG (w/ NEMA)

**IOM activities:**  
-DTM (8th Round - Feb 2015)  
-Emergency Shelter and NFI Distribution  
-Psychosocial Support - Livelihoods Support  
-Biometric Registration - CCCM Capacity Building

## Niger

**319,036** Displaced Persons\*  
Source: Govt of Niger/UNHCR/OCHA

IDPs\*\* 48% Refugees 31% Ret. 21%

**137,121** Beneficiaries Assisted

IOM is co-lead of the Shelter and NFI WG (w/ CCH – Cabinet of Prime Minister)

**IOM activities:**  
-Shelters and NFI distribution  
-Cash for Work  
-Community Cohesion  
-Income Generating Activities (IGA) for youth at risk

## Cameroon

**270,264** Displaced Persons\*  
Source: DTM (Feb 2016), UNHCR (Apr 2016)

IDPs 63% Ref. 24% Ret. 13%

**29,599** Beneficiaries Assisted

**IOM activities:**  
-DTM (2nd Round - Feb 2016)  
-Emergency Shelter and NFI Distribution  
-Support to Agriculture

## Chad

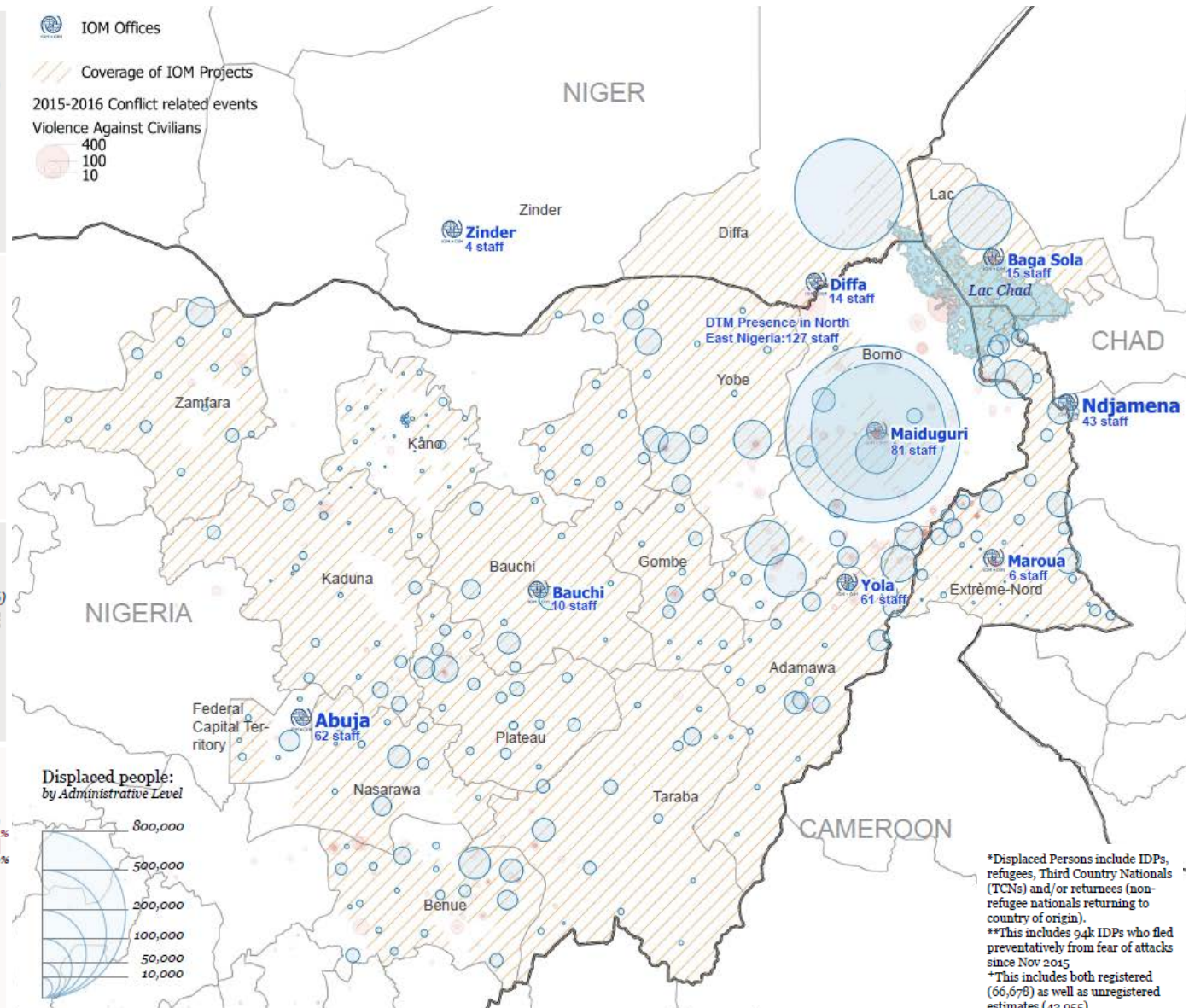
**109,633** Displaced Persons\*\*  
Source: DTM, WFP (Apr 2016), UNHCR (Mar 2016)

IDPs 74% Ref. 15% Ret. 10% TCNs: 1%

**71,368** Beneficiaries Assisted

IOM is co-lead of CCCM and Shelter/NFI clusters (w/ UNHCR)

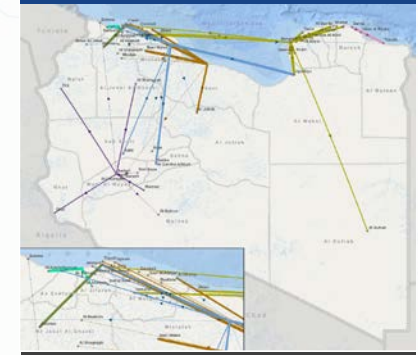
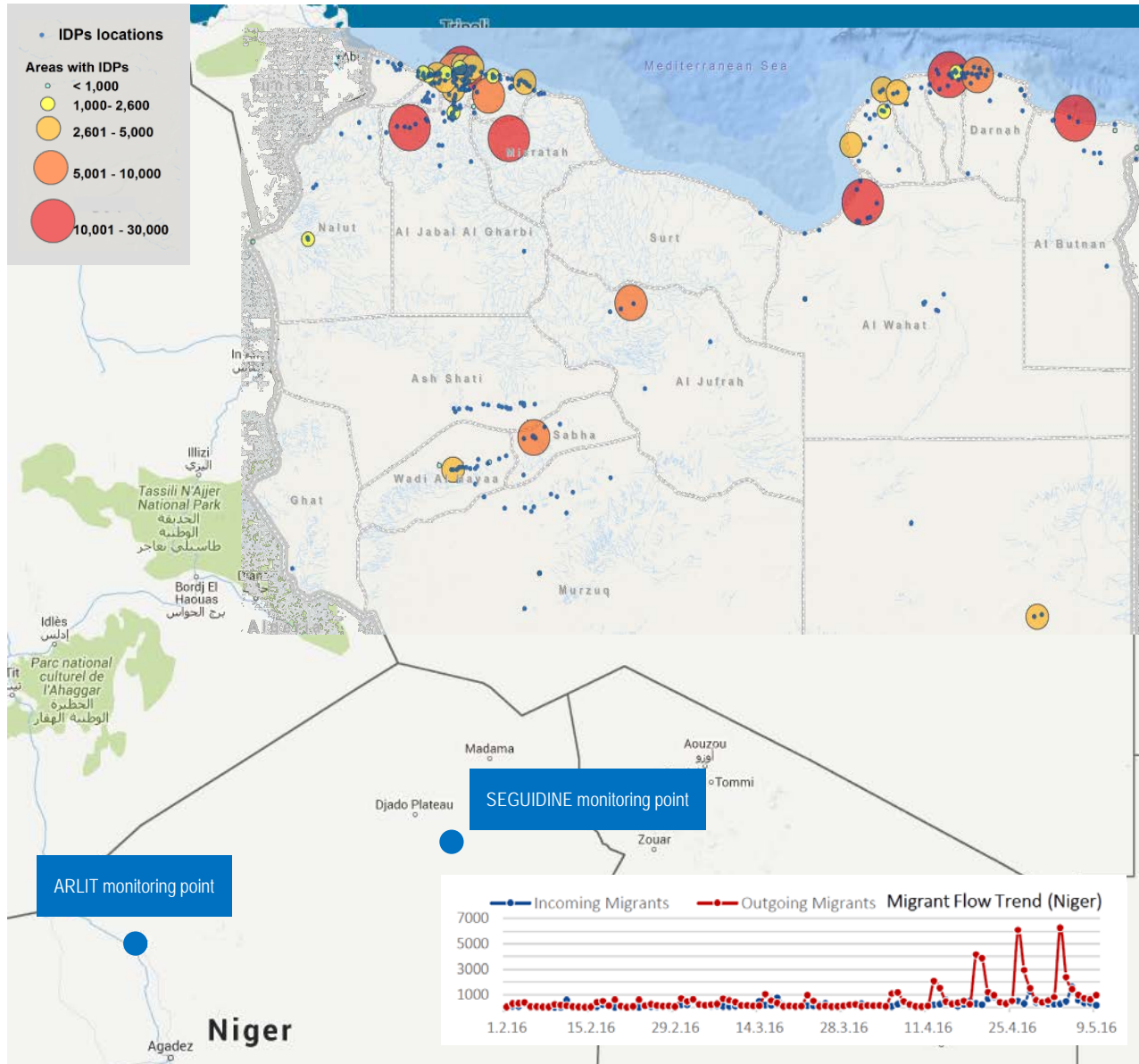
**IOM activities:**  
-DTM (4th Round - Apr 2016)  
-Emergency Shelter and NFI Distribution  
-Voluntary Relocation Support  
-Psychosocial Support



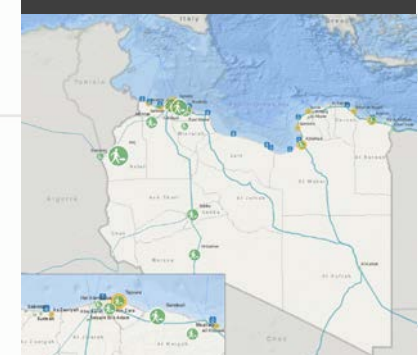
\*Displaced Persons include IDPs, refugees, Third Country Nationals (TCNs) and/or returnees (non-refugee nationals returning to country of origin).  
\*\*This includes 9.4k IDPs who fled preventatively from fear of attacks since Nov 2015  
\*This includes both registered (66,678) as well as unregistered estimates (42,955)

# NIGER/LIBYA: IDPs and Migrant Flows

DTM Libya • DTM Niger



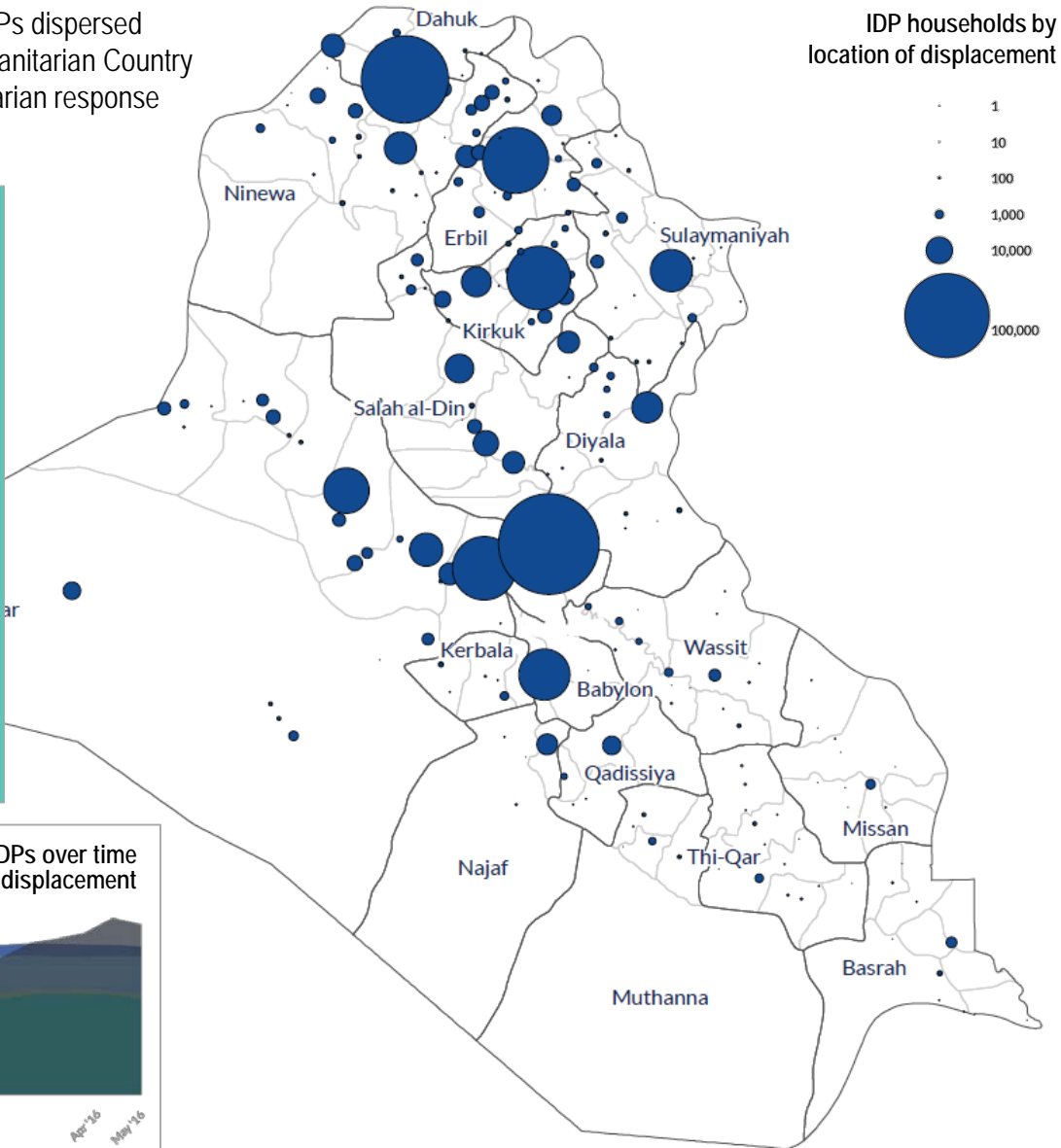
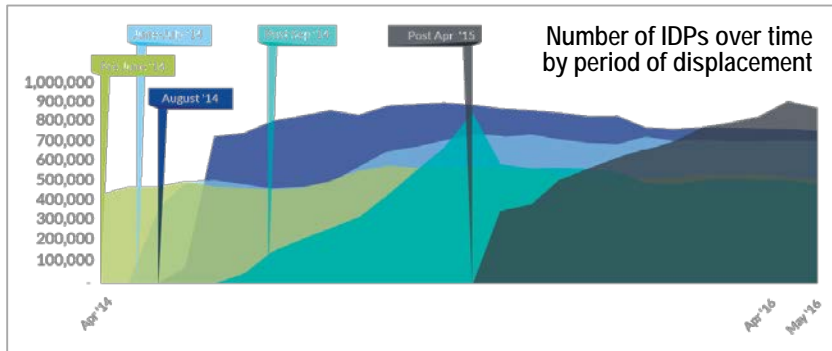
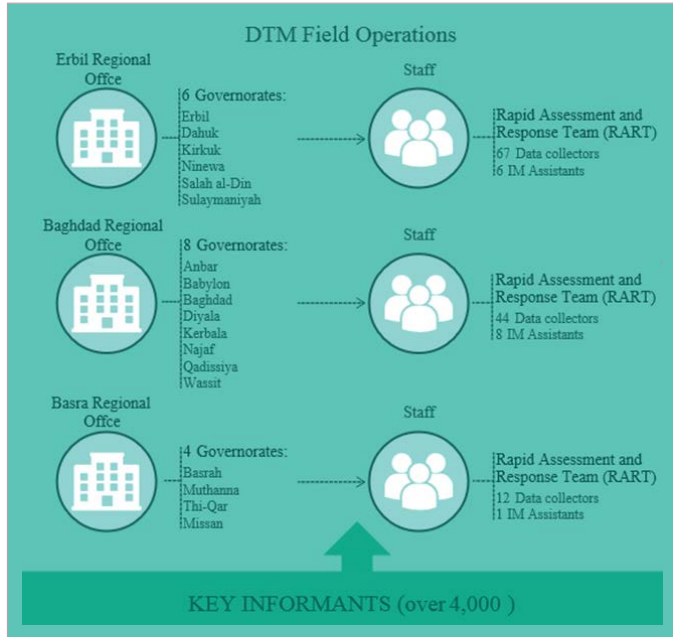
Movement flows inside Libya



Migrants crossing points inside Libya

# IRAQ CRISIS

From January 2014 to date, DTM identified 3,333,384 IDPs dispersed across 105 districts and 3,805 locations in Iraq. The Humanitarian Country Team (HCT) revised the planning figures for the humanitarian response based on information provided by DTM





# DEVELOPMENT WORK

**Confidence rating and representative networks.** Pilot countries: Iraq, Syria and Libya. Case: Syria; 14,445 key informants at the community level, 4,987 locations

Key Informants (Kis) by Type	Male	Female	Total
NGO/Humanitarian Aid Worker	1,221	106	1,327
CommunityBased Organization Lea	176	38	214
CommunityLeader	1,268	18	1,286
Health Worker	773	158	931
Religious leaders	527	1	528
Teachers	1,472	193	1,665
Trader/Shopkeeper	1,704	35	1,739
Local administration	2,576	202	2,778
Military Commander	373	3	376
Social Worker	1,452	108	1,560
Group Leader of IDP's	928	17	945
Other	1,046	50	1,096
<b>Total</b>	<b>13,516</b>	<b>929</b>	<b>14,445</b>

Citizen driven assistance and alignment with **development, transition, and stabilization indicators.**

Pilot of incident management system to facilitate faster response time to issues inside camps – partnership with ESRI.

Mainstreaming of protection in all DTM components.

Analysis of multi-year population mobility data (disasters, anonymized mobile subscribers positioning, and other secondary data)

IOM remains committed to **enhance disaster preparedness and migration crisis response** through:

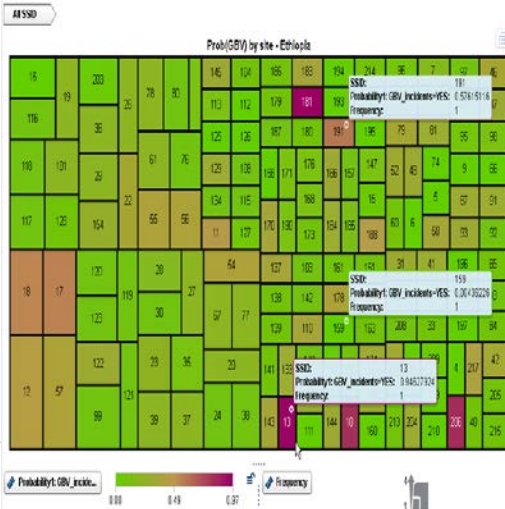
- better integration of systems and actors,
- strengthening national and local capacities on displacement tracking, and
- enhancing predictive analytics, ethical data collection
- and accountable data use

**promoting accountability towards affected populations.**

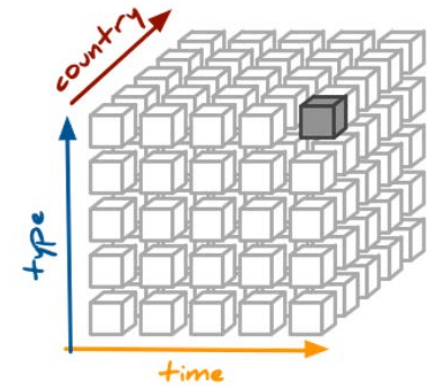
IOM Iraq calculates a confidence rating in order to produce an estimated in each location, based on the number of informants used, discrepancies between information from different sources, the accessibility of the location and the ability to independently validate the data received.

# DEV WORK

Predictive analysis combined factors for **prioritization**, and **accountable use of existing data**.  
Draft paper, partnership with SAS Institute



Use of data combined with operational workflows; unblocking factor.

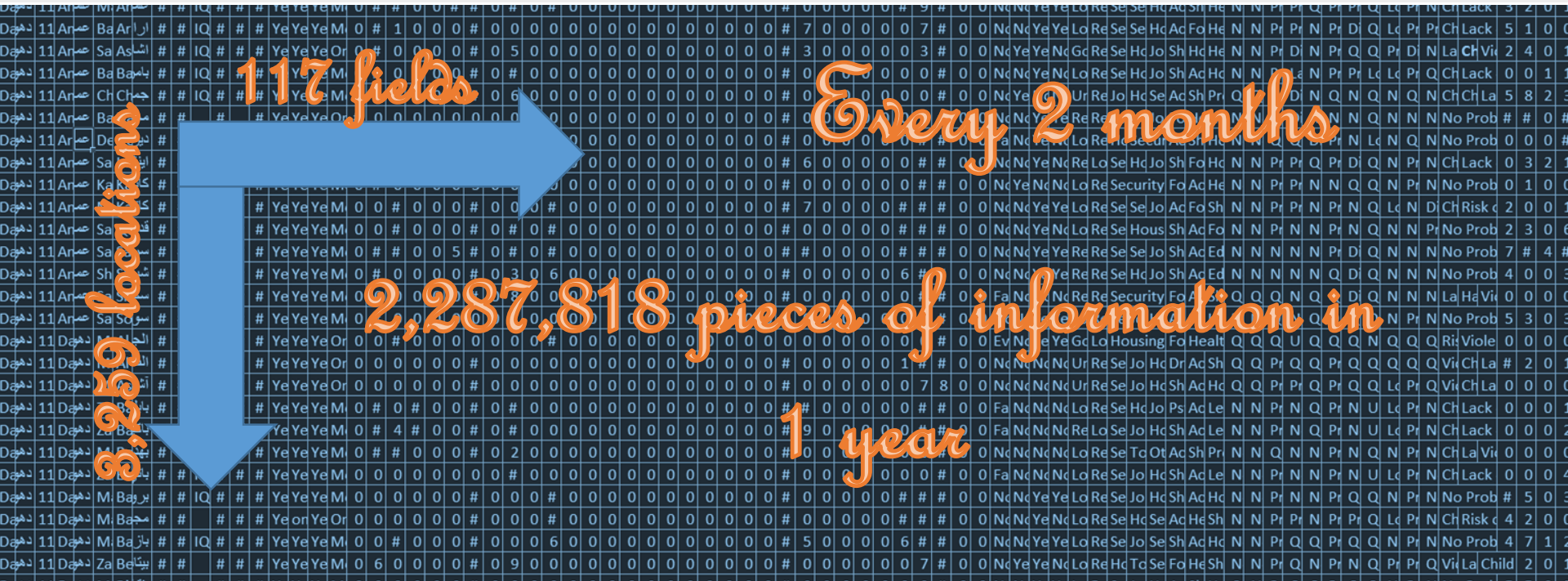


**Humanitarian data protection** to cover aspects not included in IOM's data protection guidelines (collaboration with Harvard). Sections on UAVs, Satellite imagery, Sharing of data in conflict situations, Algorithms, Predictive analysis. Collected as best practices from IOM DTM network.

Displacement Tracking Matrix (DTM) – information and operations systems to **track / monitor population mobility**. Designed to regularly capture, process and disseminate information that provides a better understanding of the movements and evolving needs of displaced populations, whether on site or en-route.



# Iraq DTM

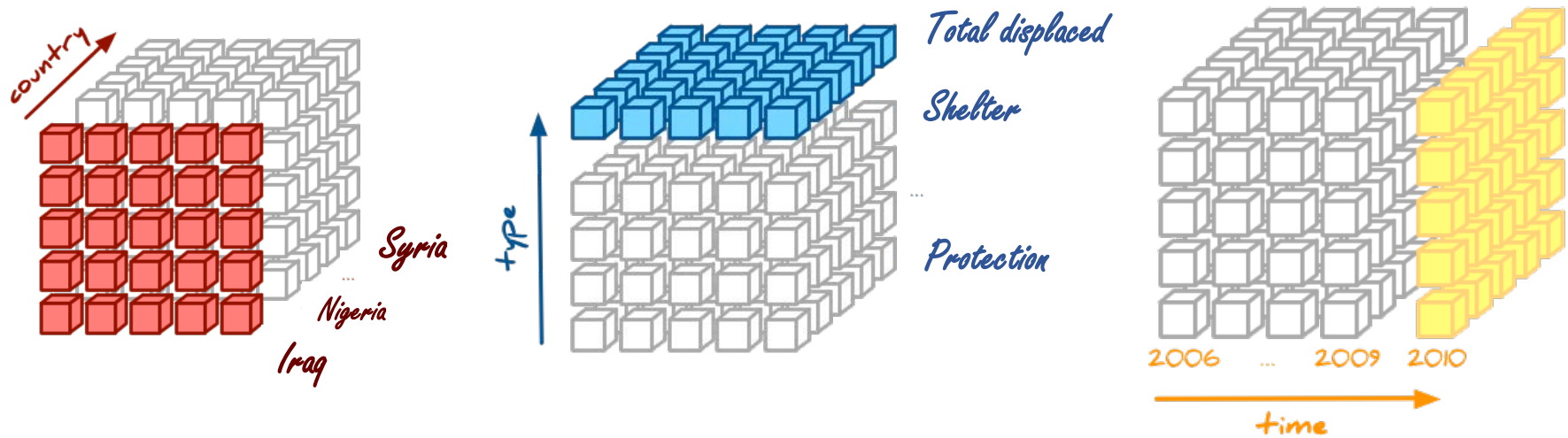


in one assessment type in Iraq

There are many assessments  
conducted both by IOM and many other organizations

Displacement Tracking Matrix (DTM) – information and operations systems to track / monitor population mobility. Designed to regularly capture, process and disseminate information that provides a better understanding of the movements and evolving needs of displaced populations, whether on site or en-route.

# Little cubes

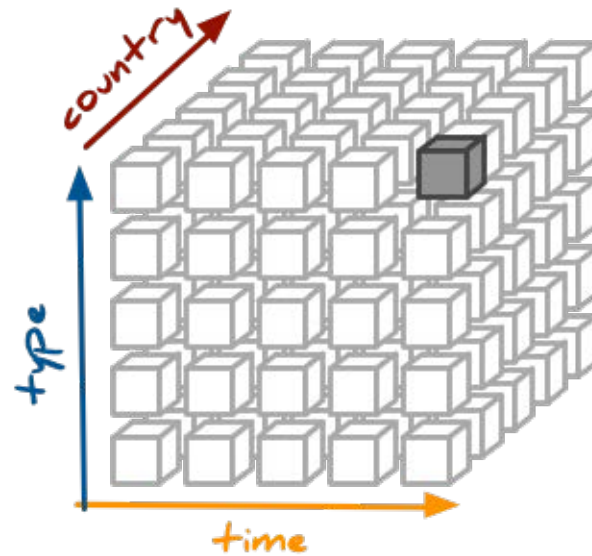


## Iraq 2.2 M pieces of information

In the red surface  
from one assessment in one year

Displacement Tracking Matrix (DTM) – information and operations systems to track / monitor population mobility. Designed to regularly capture, process and disseminate information that provides a better understanding of the movements and evolving needs of displaced populations, whether on site or en-route.

# Most common use in planning/policy



*Iraq Total displaced June 2016*

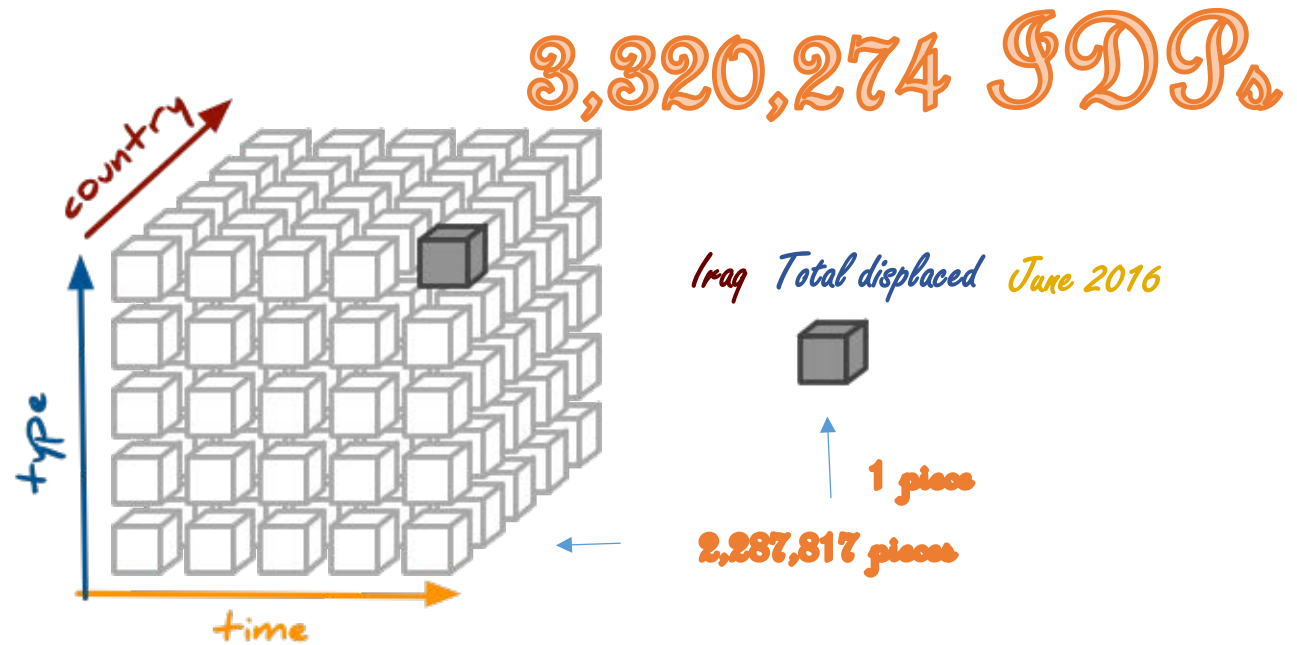


## Total number of people displaced

Consumes most time  
Policy shift – operational use of data

Displacement Tracking Matrix (DTM) – information and operations systems to track / monitor population mobility. Designed to regularly capture, process and disseminate information that provides a better understanding of the movements and evolving needs of displaced populations, whether on site or en-route.

# Use of small(er) data



## Accountability for not using data

policy  
and coordination

[dtmsupport@iom.int](mailto:dtmsupport@iom.int)

Displacement Tracking Matrix (DTM) – information and operations systems to track / monitor population mobility. Designed to regularly capture, process and disseminate information that provides a better understanding of the movements and evolving needs of displaced populations, whether on site or en-route.