

FAQ: Using Web-Intercept Surveys (RDIT) to Study Internal Displacement

This FAQ provides clear, accessible answers to common questions about using Random Domain Intercept Technology (RDIT) and related approaches to estimate and monitor Internal Displacement (IDP) figures. It is intended for humanitarian actors, researchers, and policy makers working in diverse country contexts.

3iS has supported initiatives in Colombia, Ecuador and Honduras to estimate IDP figures which successfully mobilized donors, informed humanitarian actors, and fostered dialogue with government institutions. In Colombia, displacement estimates closely matched administrative data from the national victims' registry, particularly after accounting for the proportion of respondents who stated they did not register with the state.

Random Domain Intercept Technology (RDIT), developed by RIWI, surveys internet users anonymously and randomly. The method invites users who land on inactive or mistyped websites to participate in a voluntary, anonymous survey and is complemented by Random Domain Engagement (RDE). The survey operates across all internet-enabled devices. Sampling follows a simple random approach of IP addresses, stratified to reflect national demographic profiles based on the most recent census data.



1. Who is included in the survey universe?

The survey covers people with access to the internet (mobile or fixed). National census data usually include indicators on internet access, allowing researchers to adjust our survey results to approximate the characteristics of the overall population with access to the internet, by comparing the profile of respondents with census benchmarks.



2. Doesn't this exclude rural areas or vulnerable groups with low connectivity?

Yes, populations without internet access are not reached by this method. This can underrepresent rural communities, some Indigenous groups, or other marginalized populations.

To partially address this, statistical adjustments (post-stratification or calibration) are applied using census variables such as region, age, and sex. For a comprehensive displacement picture, secondary data sources should complement estimates.



3. How is representativeness ensured given uneven internet access?

While representation is limited to the online population, the method allows for wide geographic coverage and access to areas that may be unsafe or inaccessible for in-person surveys. The anonymity of the survey encourages honest responses, particularly for sensitive topics like displacement or violence.



4. How does RDIT sampling work?

RDIT intercepts internet users through thousands of dormant domains, redirects, and common search pathways. Users may land on the survey by mistyping URLs, visiting inactive sites, or being redirected from apps and search engines. This does not depend on visiting a specific platform (like social media or a panel) and helps capture a diverse set of respondents. This method is complemented by Random Domain Engagement (RDE), a method that use active domains to show the survey randomly in banners. The survey runs across all internet-enabled devices.



5. How is repeat participation prevented?

Each respondent is assigned a unique anonymous identifier generated from IP and device configuration. This prevents multiple completions from the same device. Patterns of identical responses are also monitored and filtered out.



6. Could device-based blocking exclude other legitimate respondents (e.g., shared computers)?

This risk exists when devices are shared, but because survey access is random and spontaneous (not via shareable links), the impact is minimal. In some contexts, questions on household composition are included to help interpret results.



7. How is eligibility determined if geolocation is turned off?

Geolocation is detected automatically via IP, and respondents confirm their country of residence within the survey. Only those who self-report residency in the target country are included in analysis.



8. How large is the sample, and what is the expected response rate?

A typical target is around 1,000 completed surveys, giving a $\pm 3\%$ margin of error at 95% confidence. Historical RDIT surveys have response rates of 3–5%, similar to or slightly below modern telephone surveys, but without the same interviewer or safety constraints.



9. How is non-response bias handled, especially for sensitive topics?

No direct adjustment is possible for non-response from ineligible or unwilling participants, because the characteristics of those who do not answer cannot be observed. However, the anonymous, non-incentivized nature of RDIT reduces social desirability bias and increases the likelihood of truthful responses compared to in-person or phone interviews.

A World Bank study in Yemen found that respondents were significantly more likely to disclose sensitive information through RDIT-based web-intercept surveys than through phone surveys, with an average difference of more than 16 percentage points (Tandon & Vishwanath, 2022).



10. How is participant safety and data privacy protected?

No personally identifiable information (PII) is collected.

Responses are encrypted and do not appear in the browser history.

RIWI complies with the European Union General Data Protection Regulation -GDPR-and similar privacy regulations.

The method has been used safely in high-surveillance contexts (e.g., China, Iran, Russia, Yemen).



11. What informed consent procedures are used?

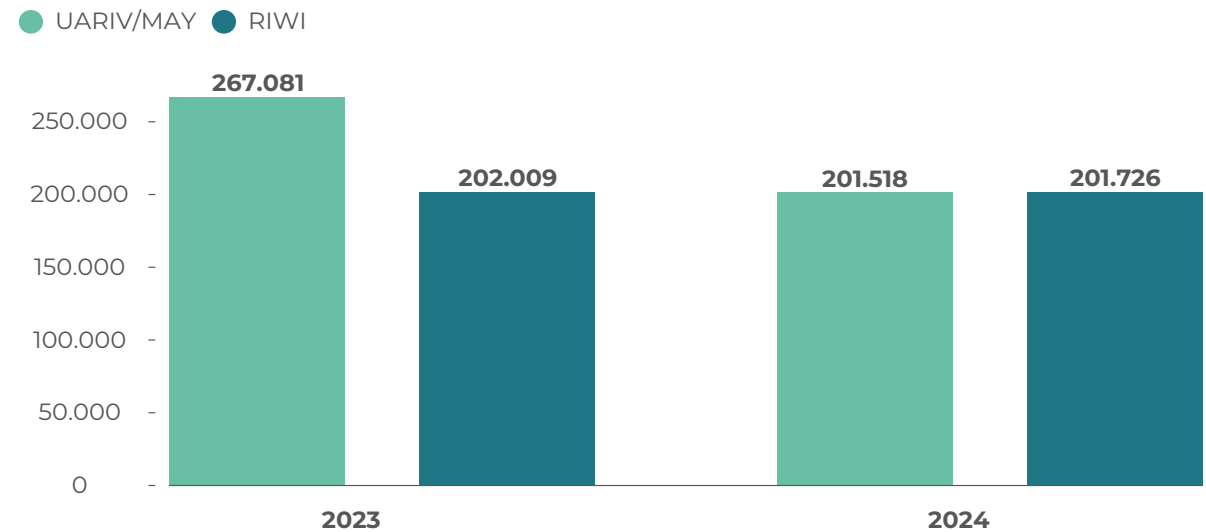
- Participants see a clear statement before starting, explaining:
- The survey is anonymous.
- No PII will be collected.
- Participation is voluntary, and they may exit at any time.



12. How reliable is the method for displacement research?

Validation exercises in Colombia show RDIT-based displacement estimates align closely with administrative records, especially when accounting for unregistered cases. Graph 1 compares the number of displaced people identified through the online survey who reported being registered with the administrative system, with the figures reported by the official registry (UARIV, by its Spanish acronym). Because the survey only reaches people with internet access, the estimated number is slightly lower than the administrative total.

Graph 1. IDPs that reported their displacement vs administrative registry in Colombia-UARIV



Source: Own elaboration based on displacement monitoring in Colombia and UARIV data. To allow sufficient time for people to report their displacement and for administrative records to be updated, the comparison uses May of the following year as the cut-off date.

In other contexts, RDIT has also proven highly reliable. For example, in the United States, RDIT-based estimates of COVID-19 vaccination rates closely matched official CDC figures at both national and state levels, differing by only about 2%—a much smaller gap than other survey instruments, which overestimated coverage by 14–17% (Sargent et al., 2022). In Central

America, the World Food Programme (WFP) used RDIT in 2021 to study migration intentions in Guatemala, Honduras, and El Salvador, finding results consistent with a traditional household survey. WFP has also applied the method to monitor trends among migrant and host communities in Colombia, Peru, and Ecuador over time (WFP, 2021).



13. Has RDIT been used outside displacement research?

Yes. RDIT has been applied in over 200 countries to study topics such as migration, gender-based violence, misinformation, and public health. Its adaptability and safety make it suitable for sensitive contexts.

Notably, the methodology has been successfully applied in countries such as China, Iran, and Russia—contexts where concerns about internet surveillance are particularly acute—demonstrating its ability to ensure respondent anonymity even in highly monitored environments.



14. How should results be interpreted?

Findings represent the online population of the target country. They are particularly valuable in:

- Countries with high internet penetration.
- Insecure areas where traditional surveys are risky.
- Rapid-onset situations require timely data.
- For populations with low connectivity, RDIT should be complemented with other methods, and data collection may also take longer in these settings.



15. What are the advantages of using this methodology?

Using RDIT offers several important benefits. It is a cost-effective approach compared to in-person interviews, since it does not require field staff or extensive logistics. The anonymity of online participation encourages more truthful responses to sensitive questions, making it more reliable than some other methods. In countries with high levels of internet connectivity, results can be obtained very quickly. In addition, RDIT can reach populations who might otherwise be excluded due to physical barriers, difficult terrain, or security restrictions.

References

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