



Improving the Effectiveness of an Integrated Measles and Meningitis A Immunization Campaign: Collaborative Planning of an Integrated Campaign in a Context of Multiple Epidemics

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Key Messages

FOSAD-CEFORPAG conducted a study in Guinea of the collaborative planning process, enablers, barriers and promising practices for an integrated campaign of two childhood vaccination campaigns for meningitis A (MenAfrivac, a newly introduced vaccine) and measles (second dose, MEAS2) for children aged 13-24 months in Guinea in an integrated campaign. The following lessons learned emerged as a result of the study:

- Collaborative planning strengthens preparedness and increases the likelihood of success of an integrated campaign, achieves human resources, time, and cost savings, and encourages stakeholder participation.
- Assessing community acceptability and concerns is a key part of the collaborative planning process.
- Governments should consider decentralized decision-making during times of competing priorities to allow areas most at risk of epidemics to implement their own campaigns more efficiently.
- The national government's support in convening and facilitating collaborative pre-planning and planning is critical to the success of integrated campaigns.
- Adverse events following immunization (AEFI) are a major concern of caregivers, therefore community sensitization and AEFI response planning are essential to an integrated campaign's success.
- Partners can play a key role by providing strategic guidance, funding, planning and operational support for the integrated campaign.
- Administrative procedures and delays in remuneration to vaccine workers may result in challenges to implementation, therefore procedures should be adapted to facilitate timely advances and electronic payments and decrease paperwork.

Abstract

The government of Guinea worked with FOSAD and CEFORPAG to conduct collaborative planning for an integrated vaccination campaign against measles and meningitis A. This process occurred in a challenging context of COVID-19 and multiple epidemics of other deadly diseases.

Located in the ‘meningitis belt’ of West Africa, Guinea experiences recurring epidemics of meningitis A and measles. These diseases overlap in high-risk areas, and children aged 13-24 months are targeted for vaccination with both MenAfrivac (MenA) and MEAS2. This study was conducted by Fondation Santé & Développement Durable (FOSAD) and Centre d'Excellence de Formation et Recherche sur les Maladies Prioritaires en Guinée (CEFORPAG) in Guinea. The aim was to examine the feasibility of an integrated vaccination campaign for meningitis A and measles in the context of the COVID-19 pandemic and other epidemics in the country. The integrated campaign was postponed due to the COVID-19 pandemic. Despite this delay, the case study was able to document the early collaborative planning stages for an integrated campaign, identify opportunities and barriers to integration in a pandemic/epidemic context, and assess acceptability of an integrated campaign across stakeholders.

This was a descriptive, mixed-methods study that conducted interviews with decision-makers across the health system: at the national, regional, and district levels and in the community. Study participants were selected based on their involvement in planning, implementation, and monitoring and evaluation of meningitis and measles campaigns. The study tool included questions about campaign governance, collaboration in campaign planning, micro-planning, and community acceptability.

Collaborative planning emerged as an important step in the integrated campaign. Overall, authorities and stakeholders had a satisfactory assessment of the process. Collaborative planning made it possible to consider the concerns of all stakeholders, including field workers, local authorities, and communities. Collective and consensus-oriented decision-making regarding the integrated vaccination campaign proved successful. Communities, local, regional, and national authorities were generally in support of the integration of MenA-MEAS2 campaigns.

The following promising practices were identified and recommended to decision makers.

- Establish administrative and financial procedures that promote transparency and accountability and reduce delays in remuneration to health workers.
- Early in the process, identify and include program champions in advocating for high-level commitment and community influencers in social mobilization to maximize the impact of collaborative planning.
- Leverage an existing campaign platform that is known and trusted by the community.
- Decentralize decision making and prioritize local action in areas most at risk of epidemics during times of competing priorities and campaigns.
- Use technology such as videoconferencing and electronic dashboards to plan and show commitment to collaboration.

- Establish a coordinating body to work with other stakeholders to make decisions about the integrated vaccination campaign.
- Convene biweekly coordination meetings with stakeholders at the national, regional, health district, and local levels.
- Involve community stakeholders in pre-planning and microplanning to improve the acceptability of the integrated campaign.

Background

Guinea is located in the ‘meningitis belt’ of Africa. The introduction of the meningococcal A conjugate vaccine, MenAfrivac (MenA), has significantly reduced the scale of these epidemics in the region, resulting in decreased morbidity and mortality (1, 2). In 2015, the World Health Organization (WHO) recommended that countries in the meningitis belt should conduct mass vaccination campaigns in individuals aged 1 to 29 years, incorporate MenA into routine childhood immunization programs, and conduct a one-time catch-up campaign for birth cohorts born since the initial mass vaccination (3).

Measles is also considered a public health problem in Guinea due to recurrent epidemics (4). Meningitis and measles overlap in high-risk areas, and children aged 1 to 5 years are targeted for vaccination against both diseases. Specifically, children aged 13-24 months are targeted for MenA vaccination and second dose measles (MEAS2) vaccination.

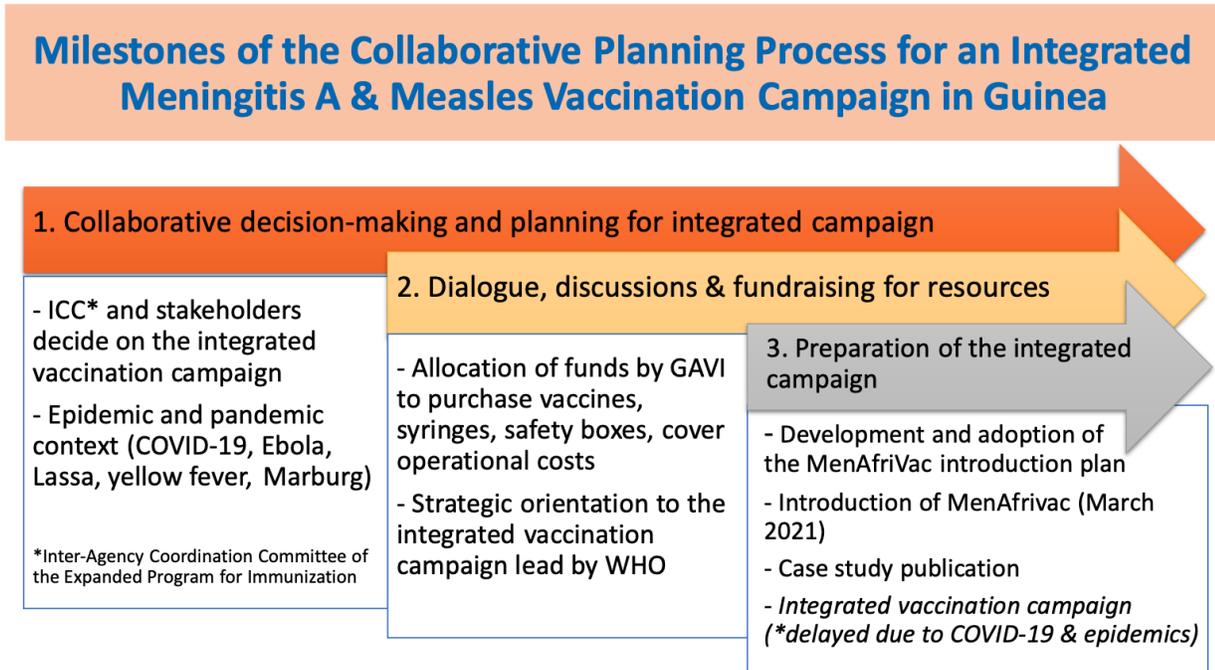
The government of Guinea undertook the process of planning for integration of MenA and MEAS2 campaigns to improve effectiveness, increase impact, and optimize resources. This case study documented the collaborative planning processes of the integrated MenA-MEAS2 campaign in the Kankan region, and identified enablers and barriers to integration and promising practices.

Planning for the integrated campaign in Guinea occurred in a very difficult context. In early 2021, the country was experiencing simultaneous occurrences of many epidemics (COVID-19, Ebola, Lassa fever, yellow fever, and Marburg fever). Furthermore, the integrated campaign came at a time when COVID-19 vaccine hesitancy was emerging. The campaign was planned to take place in Guinea in February 2021; however, implementation was delayed due to the effects of the pandemic and other epidemics.

Strong political orientations, conflicting agendas and priorities, and weak leadership and health system governance also presented challenges to integration (6). Despite the significant availability of financial resources, the Guinean health system is fragile and uncoordinated. Many programs and projects are initiated and proposed by partners; the weakness of national leadership means that the verticalization of programs under the influence of partners often becomes the norm. Thus, campaigns are often carried out in isolation and in a repetitive manner. This poor coordination of campaigns has many consequences for the health system, health professionals, and communities.

Integration of the MenA and MEAS2 campaigns presented an opportunity to capitalize on the strengths of collaborative planning, optimize resources, increase coordination across partners, strengthen government ownership, and ultimately, ensure the delivery of essential health services during a time of uncertainty.

Chart 1. Milestones of the collaborative planning process for integrated meningitis A and measles vaccination campaign in Guinea.



Objectives and Methods

The goal of this case study was to help Guinean decision-makers, technical partners, and donors to identify ways to improve the effectiveness of meningitis A and measles vaccination campaigns through integration.

The objectives of the study were to:

- Identify challenges and opportunities related to collaborative micro-planning for the MenA-MEAS2 integrated campaign.
- Assess the feasibility of integration of MenA-MEAS2, and identify enablers and barriers in a pandemic/epidemic context.
- Determine levels of acceptability and engagement of communities with regards to the integrated campaign.

The study team carried out a descriptive, mixed-methods study which included a desk review of reports and EPI strategic documents, followed by stakeholder interviews. The protocol was approved by the National Ethical Committee. The research team developed data collection tools and formulated questions according to

the study objectives; the interviews touched on campaign governance, aspects of collaboration in campaign planning, micro-planning and community acceptability.

Study participants were selected from all levels involved in the integrated campaign (i.e., central, regional, district, and community). The selection of participants was based on a number of criteria, including their involvement in the collaborative planning, implementation, and/or M&E of the integrated MenA-MEAS2 campaign, or status as a community member in the Kankan region. Interviewees indicated their willingness to participate in the study by signing an informed consent form.

Interviewees included the Lead of programs at the Ministry of Health (MOH), program managers, technical and financial partners, executives of health districts, heads of health centers, community leaders, as well as the households. At the household level, only one person was interviewed, either the head of the household or the mother of a child of age to be vaccinated. Households were selected based on their links to health centers; 20 households per health area were randomly selected.

Qualitative data management and analysis was done in Sphinx software by a team of socio-anthropologists who worked on data collection, transcription of the audio files, and analysis of data. The qualitative study data were processed using a thematic approach and inductive coding. The coding process began by identifying the main topics covered during the interviews. The data were further analyzed according to recurring themes and sub-themes, and quotes were selected from interviews that illustrated these themes.

In addition to the interview protocol, FOSAD staff members also observed various EPI coordination meetings as well as the integrated campaign planning technical meetings alongside implementing partners throughout the study period. Stakeholders used the decision-making guidance tool for the integration of campaigns produced by the Health Campaign Effectiveness Coalition during these meetings (7). The study team used a WHO dashboard for the monitoring of planning and micro-planning work at the health district level.

Results

Convening stakeholders

Pre-planning and collaborative planning meetings were convened and facilitated under the leadership of the National Directorate for the Control of Disease and Major Endemics (NDCDME), the Inter-Agency Coordination Committee (ICC) of the EPI, and the National Agency for Health Security (NAHS). The EPI and NAHS represent the programmatic and operational entities for the implementation of the country's vaccination campaigns. The recently established Program Management and Coordination Support Unit (PMCSU), which implements administrative and financial procedures to improve transparency and accountability to the Government and donors, was involved in the justification and allocation of resources for the integrated campaign (8).

Biweekly coordination meetings were organized with partners, donors, and health district officials including:

- WHO (including two consultants appointed to support the campaign at the central level)
- Gavi

- UNICEF
- Civil society organizations (CSOs)
- Executives of the regional prefectural health directorates
- Focal points of the implementing partners at the regional level
- Municipality administrative authorities

Microplanning was undertaken with staff from supply districts and health centers who coordinate supply and logistics, implement communication and community sensitization activities, and supervise activities.

The **involvement of community stakeholders** in pre-planning, microplanning, and community engagement improved the acceptability of the planned integrated campaign. Overall, local authorities, communities, and stakeholders were in support of the integration of MenA-MEAS2 vaccination. The planning process incorporated the views of the target communities about the integrated campaign. Leaders, CSOs and community groups, heads of households, and children’s caregivers were interviewed during the study.

Chart 2. Categories of stakeholders involved in the integration process.



Chart 3. Approach to engaging stakeholders at various levels.

Engaging Key Stakeholders

Central level: MOH, Program Management and Coordination Support Unit (PMCSU), EPI, National Health Security Agency NAHS, WHO, UNICEF	EPI coordination meetings and integrated technical meetings for campaign planning, including implementing partners and stakeholders.
Health Region, District, Health Centers	Virtual bi-weekly coordination meetings organized with partners and health district officials to discuss micro-planning. Teams deployed to observe the micro-planning meetings. Interview of health actors at the regional and district levels.
Communities & Households	Interviews about the perception and acceptability of the integrated campaign by community stakeholders (leaders, organizations and community groups, heads of households, and children’s caregivers.)

Stakeholder viewpoints on integration

Stakeholders at the national, local, and community level were asked for their views on the integration approach to these two campaigns. Overall, these stakeholders were in support of the integration of MenA-MEAS2 vaccination. They believe it is relevant to implement the integrated campaign for three main reasons:

1. Vulnerability of their localities to meningitis and measles. The head of the Kankankoura Health Center stated that, "[This] prefecture is threatened because it is located in the meningitis belt, and the seasonal upsurge of the two diseases [meningitis and measles] sufficiently justifies the integrated campaign."
2. Weak management capacity of current vaccination campaigns (and in mining areas, difficulties in managing migrant populations during campaigns).
3. Compatibility of the two vaccines in terms of target age groups, delivery method, and human resources required.

The following factors were identified by stakeholders as the main drivers of integration of the MenA and MEAS2 campaigns:

- MenA and MEAS2 vaccine campaigns both target children in the same age group (i.e., 13-24 months).
- There is overlapping seasonality and geographies of meningitis and measles epidemics.
- The two vaccine campaigns share common schedules, procedures, logistical operations, sources of funding, and partner support. Both campaigns are administered by the Expanded Program of Immunization (EPI).
- Multiple concurrent epidemics in the country necessitated a streamlining of campaign programs.

- An integrated campaign may improve cost effectiveness.
- Health workers and communities felt strained by the implementation of multiple campaigns.
- Community acceptance of the two interventions is high, particularly for measles vaccination.
- There is a need to improve coverage amongst high risk and marginalized groups, and migrant workers in mining areas.

Enabling factors

Overall, the authorities and all stakeholders had a satisfactory assessment of the collaborative planning process. The strengths of this process were **collective, consensus-oriented decision-making** and **early involvement of all stakeholders**, including at the community level. The collaborative planning process identified roles, responsibilities, and bottlenecks at all levels of involvement. This approach enabled **identification of mitigation measures**, and the **harmonization of planning and management tools**.

A major factor in the success of the process was the **commitment of the Government** to support collaborative planning, and the involvement of the ICC of EPI. This commitment was demonstrated by convening stakeholder meetings, making consultants available to support the work, and providing digital tools, including a planning dashboard and videoconferencing tools.

The **willingness of key partners** to support and operationalize the integrated campaign was another factor in success. As a result of collaborative planning, WHO endorsed the integrated campaign and provided strategic guidance for planning and implementation.

The **availability of resources and mobilization of funds** was another key outcome. GAVI agreed to secure funding for both the introduction of MenAfrivac into the routine immunization schedule and the integrated campaign; meetings were organized to mobilize funds for forecasting and obtaining vaccines through UNICEF. A strategic document for the introduction of MenA was developed and validated by the EPI and its partners following an assessment of cold chain capacity and vaccine safety.

Challenges and Mitigation During the Case Study

The biggest challenge to implementation of the campaign was the COVID-19 pandemic and several concurrent epidemics, which postponed the introduction of MenA into the routine EPI until March 2021. The integrated campaign was delayed as government priorities shifted to emergency response.

The EPI Coordinator at the central level described other challenges to implementation as follows: *“These are issues linked to the programmatic aspects: the support of the population, the motivation of the vaccinators and the adequacy of the funding.”*

- **There were missed opportunities for integration with other health campaigns** (i.e., insecticide-treated mosquito net distribution, vitamin A distribution, and seasonal malaria chemoprophylaxis), mainly due to a lack of synchronized planning and funding.

- **New funding and administrative procedures** put in place by the newly formed PMCSU were associated with some delays.
- **Vaccinators and local health authorities had concerns** about workload, poor motivation, cumbersome administrative procedures, and remuneration. A health center manager lamented the potential overload of work with these words: *“For some vaccination [campaigns], we had 40 teams of vaccine agents, but the last few campaigns we only had 15 to 20 teams. If there are not many teams, it is difficult to cover the entire population.”*
- Some community members expressed concerns about **vaccine safety and side effects**. A mother interviewed in Karifamoriah described her concerns about co-administration of vaccines: *“We cannot do both at the same time, because by doing both at the same time it will hurt the child too much and he will cry a lot.”*

The study team identified the following mitigating factors to the above challenges.

- There is a need to **prioritize fully or partially integrated campaigns**, even during epidemics of other diseases.
- **Decentralization of decision-making on campaign integration** to regional and district levels would enable high-risk areas to implement integrated campaigns more efficiently, even when national priorities shift.
- **Vaccinators and communities must be engaged** to build buy-in and achieve high coverage. The opportunity to express concerns and ideas should be given to these groups during the pre-planning process.
- Vaccinators should be guaranteed **timely remuneration, sufficient training, and manageable workloads**.
- **Community sensitization** should take place to mitigate fears of and manage potential adverse events.

Promising Practices

The study team identified the following promising practices that should be consistently applied to collaborative approaches to campaign integration:

- **Establish administrative and financial procedures** that promote transparency and accountability and reduce delays in remuneration to health workers.
- **Maximize the impact of collaborative planning through proper identification and early inclusion of all stakeholders**, thorough listening to all perspectives, collective and consensus-oriented decision-making, and advocating for better involvement of local authorities and communities. Collaborative planning and involvement of community leaders and actors at an early stage will improve the acceptability of an integrated campaign to the population.
- **Leverage an existing campaign platform that is known and trusted by the community** to increase acceptability and community participation in the integrated campaign.
- **Decentralize decision-making during times of competing priorities and campaigns** to allow areas most at risk of epidemics to carry out and implement their own campaigns.

- **Use technology, such as videoconferencing and electronic dashboards**, during campaign pre-planning, planning and preparation to facilitate collaboration. Where possible, providing equipment and technology support to stakeholders also demonstrates government and partner commitment to collaboration.
- **Establish a coordinating body**, such as the Inter-Agency Coordination Committee (ICC) of the Expanded Program for Immunization, to work with other stakeholders to make decisions about the integrated vaccination campaign.
- **Convene biweekly coordination meetings** with stakeholders at the national, regional, health district, and local levels.
- **Involve community stakeholders** in pre-planning and microplanning to improve the acceptability of the integrated campaign.

Lessons Learned

The following lessons learned were developed as a result of unexpected findings and/or challenges encountered during this study.

1. **Collaborative planning is an important step in campaign integration because it strengthens preparedness and increases the likelihood of success of an integrated campaign.** Collaborative planning worked well in this context due to the overlap in staffing across the two campaigns; time and cost savings achieved by combining micro-planning and logistics; and stakeholders' appreciation of and enthusiastic participation in the process.
2. **Assessing community acceptability is a key part of the collaborative planning process.** Interviews with community members identified attributes of integrated campaigns that would appeal to the community, as well as concerns (e.g., fears over adverse events) that need to be addressed via social mobilization.
3. **Governments should consider decentralized decision-making during times of competing priorities and campaigns** to allow areas most at risk of epidemics to carry out and implement their own campaigns. Decentralization of decision-making on campaign integration to regional and district levels would enable high-risk areas to implement integrated campaigns more efficiently, even when national priorities shift.
4. **Involvement and support of national governments are critical to the planning of integrated campaigns.** Pre-planning and collaborative planning meetings were convened and facilitated under the leadership of the National Directorate for the Control of Disease and Major Endemics (NDCDME), the Inter-Agency Coordination Committee (ICC) of the EPI, and the National Agency for Health Security (NAHS). The EPI and NAHS represent the programmatic and operational entities for the implementation of the country's vaccination campaigns.
5. **Adverse events following immunization (AEFI) are one of the major concerns of mothers in the community.** AEFI is a factor that could hinder community participation due to the combination of two vaccines being delivered in the same campaign. Sensitization of communities to the potential effects of the vaccines, especially mothers and care-givers of children, and creating a strong plan for monitoring and responding to any AEFI that may occur, are both essential to an integrated campaign's success.

6. **Partners can play a key role in supporting and operationalizing the integrated campaign.** As a result of collaborative planning in Guinea, the WHO endorsed the integrated campaign and provided strategic guidance for planning and implementation, GAVI agreed to secure funding for both the introduction of MenAfrivac into the routine immunization schedule and the integrated campaign and a strategic document for the introduction of MenA was developed and validated by the EPI and its partners following an assessment of cold chain capacity and vaccine safety.
7. **Administrative procedures and delays in remuneration to vaccine workers may result in challenges to implementation.** In Guinea, the MOH has undergone reform following mismanagement of donor funds, and the PMCSU was created to establish new procedures for transparency and accountability. All vendors and health programs must comply with procedures, and justify advances and electronic payments. These new procedures increased paperwork and caused dissatisfaction among health workers. The PMCSU should consider adapting administrative and financial procedures to context so as not to hinder implementation. In particular, the timely payment of daily remunerations of vaccinators and local teams would increase the chance of success of the integrated campaign.

Conclusion

Overall, authorities and stakeholders had a satisfactory assessment of the collaborative planning process. Communities and local, regional, and national authorities supported the integration of MenA-MEAS2 campaigns. Collective and consensus-oriented decision-making was facilitated with the use of online tools. The early involvement of community actors and consideration of their perspectives improved local acceptability of the planned integrated campaign. Listening at the household level revealed concerns about AEFI, indicating the need for community sensitization and planning for robust monitoring and response to any events. Examination of barriers faced by vaccine teams revealed that new administrative and payment procedures may result in low morale, which may be addressed by adapting procedures to context and ensuring timely remuneration of field workers. The COVID-19 pandemic and concurrent epidemics led to postponement of the integrated campaign. This situation revealed the need to prioritize decentralization and the continuum of care in high-risk areas.

The framework for collaborative planning developed during this study will inform next steps in the integrated campaign implementation, and serve as a basis for advocacy for improving health campaigns and scaling up integration nationwide.

Acknowledgements

Fondation Santé & Développement Durable (FOSAD) and Centre d'Excellence de Formation et Recherche sur les Maladies Prioritaires en Guinée (CEFORPAG) acknowledge the following people and organizations for their contributions to this study:

- Dr. Aissatou Satourou Diallo, Deputy National Director, National Directorate of Major Endemics and Disease Control
- Dr. Moustapha Dabo, Expanded Immunization Program
- Dr. Timothée Guilavogui, Director of the Program Management Support and Coordination Unit
- Prof. Alioune Camara, Deputy Coordinator of the National Malaria Control Program
- Faculties of Health Sciences and Techniques, Gamal Abdel Nasser University of Conakry

The Health Campaign Effectiveness Program (HCE) thanks Laura Nic Lochlainn, World Health Organization (WHO), Joseph Oteri, Nigeria Governors Forum, and Robert Perry, Centers for Disease Control and Prevention (CDC), for their review of this report. HCE team members contributing to the case study template and design, award management, and reviewing and editing the report include Valentina Ballesteros, Eva Bazant, Jessica Cook, Kerry Gallo, Sarah Gilbreath, Carol McPhillips-Tangum, Vivek Patel, Kristin Saarlus, Allison Snyder, and Anupama Tadanki.

This work received financial support from the Health Campaign Effectiveness Program at The Task Force for Global Health, which receives funding from the Bill & Melinda Gates Foundation.

Suggested Citation

Improving the Effectiveness of an Integrated Measles and Meningitis A Immunization Campaign: Collaborative Planning of an Integrated Campaign in a Context of Multiple Epidemics. Republic of Guinea; Decatur, GA, USA. Fondation Santé & Développement Durable (FOSAD) and Centre d'Excellence de Formation et Recherche sur les Maladies Prioritaires en Guinée (CEFORPAG); Health Campaign Effectiveness/The Task Force for Global Health, Inc.; 2022.

For more information on this topic or to discuss further with the Health Campaign Effectiveness team, please visit www.campaigneffectiveness.org or contact the program directly at: campaigneffectiveness@taskforce.org

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