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Research Report

Strengthening Interoperability and Collaboration in Humanitarian Supply Chains

Advancing Inter-Agency Coordination across the United Nations

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Online Appendix

Existing Supply Chain Collaboration Initiatives

1. UN Humanitarian Response Depot (UNHRD)

1.1 Overview

The UN Humanitarian Response Depot (UNHRD) is a core component of the UN humanitarian logistics architecture, supporting system-wide emergency preparedness and response through a network of strategically located logistics hubs (Batur Sir & Caliskan, 2020; UNHRD, n.d.-b, n.d.-e). Established in 2000 and managed by the World Food Programme (WFP), UNHRD enables more than 100 humanitarian partners to pre-position and rapidly deploy emergency relief items in response to crises worldwide (UNHRD, n.d.-f, n.d.-b). Its service model is designed to deliver speed, cost efficiency, and environmental responsibility, in line with UN-wide objectives to reduce duplication and optimize operational resources during humanitarian emergencies (UNHRD, n.d.-f, n.d.-b).

UNHRD focuses on three core areas: effective relief delivery, improved coordination, and strengthening the humanitarian community through partnerships among UN agencies, non-governmental organizations (NGOs), governmental organizations, and universities (UNHRD, n.d.-c). In addition, UNHRD facilitates research and development related to innovative logistics solutions and products, with a particular emphasis on “greening” initiatives such as renewable energy, material reuse, and recycling (UNHRD, n.d.-b).

UNHRD’s services can be broadly grouped into three categories: standard services offered free of charge, specific services provided on request and on a full cost-recovery basis, and specialized training (UNHRD, n.d.-c). Standard services include free storage of emergency relief items, stock reporting, inspection services, cargo handling, and the management of import and export documentation (UNHRD, n.d.-c). Specific services, which are delivered upon request and charged at full cost to the requesting organization, include stock maintenance, offloading and transfer of unpalletized cargo or cargo requiring special equipment, training facilities and services, and technical field support (UNHRD, n.d.-c). In addition, UNHRD offers training facilities for humanitarian preparedness, including scenario-based exercises and simulations for partners, governments, contractors, and WFP staff (UNHRD, n.d.-c).

UNHRD operates a global network of hubs located in Brindisi (Italy), Accra (Ghana), Dubai (United Arab Emirates), Kuala Lumpur (Malaysia), and Panama City (Panama). These hubs are strategically positioned near major transport routes and disaster-prone regions, enabling rapid emergency deployment (WFP, n.d.). Beyond logistics operations, the hubs also function as regional training and innovation centers, providing scenario-based exercises and technical workshops for humanitarian actors (UNHRD, n.d.-b, n.d.-h).

In 2023, UNHRD responded to 993 service requests, supported 83 partner organizations, and dispatched more than 11,568 metric tons of relief items to 113 countries and territories (UNHRD, n.d.-h). The partners making the most extensive use of UNHRD services in 2023 included (UNHRD, n.d.-h):

- World Food Programme (WFP)
- United Nations Population Fund (UNFPA)
- World Health Organization (WHO), including the Pan American Health Organization (PAHO)
- United Nations Children’s Fund (UNICEF)
- United Nations High Commissioner for Refugees (UNHCR)
- Governments, including those of Ireland and Italy
- European Civil Protection and Humanitarian Aid Operations (DG ECHO)
- ASEAN Coordinating Centre for Humanitarian Assistance on Disaster Management (AHA Centre)
- ShelterBox
- Action Against Hunger (ACF)
- World Vision

The main categories of items delivered through UNHRD in 2023 included shelter kits, hygiene products, food rations, medical kits, and logistics support equipment (UNHRD, n.d.-h).

The governance of UNHRD is centralized under WFP, which acts as the service provider for the UNHRD system (Mochizuki et al., 2015). This structure is supported by dedicated working groups, such as the Stock Management Taskforce, which brings together major partners to streamline inventory management and promote the standardization of relief items (UNHRD, n.d.-h).

UNHRD operates under a horizontal cooperation model, allowing humanitarian organizations to store inventory in shared hubs and conduct stock transshipments when needed (Noham & Tzur, 2020). In this context, cooperation

refers to collaborative activities among partner organizations, while coordination is ensured by WFP through UNHRD to align individual efforts with broader system-wide objectives (Noham & Tzur, 2020).

UNHRD is funded through a combination of donor contributions, host country support, and income generated from specific services (UNHRD, n.d.-h, n.d.-c). In 2023, contributions reached their highest level since the network's expansion in 2006 (UNHRD, n.d.-i). The provision of free storage, made possible through host government support, enabled UNHRD partners to save approximately USD 8.4 million in global storage fees in 2023 (UNHRD, n.d.-h). Donors include the national governments of the European Union, Ghana, Ireland, Italy, Malaysia, Panama, Switzerland, and the United Arab Emirates (UNHRD, n.d.-a).

1.2 Benefits

UNHRD provides several important benefits to the humanitarian community. One of its most significant advantages is the ability to pre-position and dispatch essential relief items within 48 hours of an emergency, substantially accelerating humanitarian response times (WFP, n.d.). This rapid deployment capacity is particularly critical during the first 90 days of a crisis, when timely access to life-saving supplies has the greatest impact on affected populations (UNHRD, n.d.-h).

During large-scale disasters, local governments, often supported by the UN, typically assume responsibility for coordinating the entry and operations of multiple humanitarian actors (Keshvari Fard & Papier, 2023). In such contexts, effective collaboration depends on the ability of diverse organizations to contribute their specialized resources, such as vehicles, drones, medical personnel, or relief items (Keshvari Fard & Papier, 2023). Major emergencies can involve thousands of actors operating across the 11 UN cluster sectors, including logistics, nutrition, and health, all working simultaneously to deliver assistance (Keshvari Fard & Papier, 2023). UNHRD's capacity to rapidly provide access to pre-positioned supplies plays a crucial role in enabling this level of coordinated, multi-actor response (Keshvari Fard & Papier, 2023).

UNHRD's shared service model generates cost savings for participating organizations through consolidated procurement, shared transportation, and free warehousing services (Mochizuki et al., 2015; UNHRD, n.d.-c). In addition, real-time stock visibility and stock loan mechanisms enhance coordination among partners, reduce waste, and support more responsive inventory management (Toyasaki et al., 2017). Partners are able to transship inventory and borrow stock from one another when needed, avoiding duplication and improving overall system efficiency (UNHRD, n.d.-h; WFP, n.d.).

Training and capacity-building represent further benefits of the UNHRD service offering (UNHRD, n.d.-a, n.d.-h). In 2023, UNHRD hosted 24 training activities and workshops for nearly 950 participants across its hubs, including joint simulations with organizations such as UNHCR, Médecins Sans Frontières, and the International Federation of Red Cross and Red Crescent Societies (UNHRD, n.d.-h). These activities strengthen preparedness and technical capabilities across the humanitarian system (UNHRD, n.d.-h). Specialized training programs, including the Logs Base Lab (focused on emergency logistics) and Emergency Management Workshops, further contribute to the development of both local and international response capacity (UNHRD, n.d.-h).

Innovation is another core dimension of UNHRD's value proposition (UNHRD, n.d.-e). The Innovation Lab based in Brindisi develops and scales solutions using stakeholder-centered design approaches, ensuring that innovations are closely aligned with operational realities and user needs (UNHRD, n.d.-e). Examples include solar-powered warehouses, optimized packaging solutions, and standardized humanitarian products (Regattieri et al., 2018; UNHRD, n.d.-i, n.d.-f). These initiatives contribute to environmental sustainability while also improving operational efficiency (UNHRD, n.d.-i). Innovations are systematically tested and validated through real-world application and feedback, and are prioritized based on their scalability and ease of deployment across humanitarian operations (UNHRD, n.d.-i).

1.3 Challenges

Despite its achievements, UNHRD faces a number of persistent and emerging challenges. Humanitarian crises have become increasingly complex, urgent, and large in scale, placing growing demands on logistics systems and highlighting the need for stronger collaboration, greater efficiency, and a sustainable business model (UNHRD, n.d.-f). To remain effective under these conditions, UNHRD must continue to adapt by strengthening partnerships, embracing innovation, and reinforcing its role as a shared logistics platform for the humanitarian community (UNHRD, n.d.-f).

Addressing these challenges is critical to ensuring that UNHRD can continue to support faster, more effective, and better-prepared humanitarian responses in the future (UNHRD, n.d.-f).

Financing has been one of UNHRD's central challenges since its establishment (WFP, 2014). Audit findings from 2014 highlighted that donor contributions constituted the primary source of revenue, with most funding earmarked for specific purposes rather than available for general operational use (WFP, 2014). In 2015, UNHRD experienced a 25 percent shortfall in operational funding (Mochizuki et al., 2015). Financial sustainability remained a concern in 2017, with a persistent operational funding gap of approximately 25 percent (Toyasaki et al., 2017). Although some services are offered on a cost-recovery basis, UNHRD's continued reliance on voluntary donor contributions exposes the system to funding volatility and geopolitical developments (Toyasaki et al., 2017). A 2022 review noted that a new financing model was under development, with full implementation expected within a few years (UNHRD, n.d.-g). However, the 2023 review did not provide updates or specific references to progress on this initiative (UNHRD, n.d.-h). Given the growing demand for UNHRD services, financing can therefore be considered an ongoing challenge.

Operational challenges have also affected UNHRD's performance. These include long lead times for restocking and procurement, ranging from three to six months, along with inconsistent traceability and complex tendering procedures (Toyasaki et al., 2017). Such constraints can reduce service quality and have, in some cases, led partners to scale back their use of UNHRD facilities (Toyasaki et al., 2017). While the introduction of information technology systems has helped address several of these issues and improve operational efficiency, interoperability remains limited (Toyasaki et al., 2017). In particular, differences in enterprise resource planning (ERP) system architectures across agencies restrict system integration and make real-time stock reconciliation challenging (Executive Committee of the High Commissioner's Programme, 2024).

Finally, coordination across a diverse user base, including UN agencies, non-governmental organizations, and national governments, creates additional logistical and governance challenges (Mochizuki et al., 2015). Variations in operational cultures, institutional priorities, and risk tolerance can hinder joint action and slow decision-making (Mochizuki et al., 2015). Securing sustained cooperation from all partners, especially when introducing new procedures or innovations, therefore requires strong leadership, effective coordination mechanisms, and significant diplomatic effort (UNHRD, n.d.-f).

1.4 Learnings

UNHRD offers several lessons and best practices that may be replicated in other humanitarian supply chain contexts. Its model of horizontal cooperation, where participating organizations share infrastructure and services, demonstrates that collective logistics arrangements can function effectively without centralized command structures, provided that appropriate incentives, transparency, and trust are in place (Mochizuki et al., 2015). This approach contrasts with vertical cooperation models, which involve coordination among actors operating at different stages of the supply chain (Mochizuki et al., 2015). In the case of UNHRD, horizontal cooperation has proven particularly effective in logistics operations, procurement activities, and shared inventory management (Mochizuki et al., 2015).

UNHRD also highlights the importance of soft governance mechanisms, such as technical agreements, standardized procedures, and continuous engagement with the partner community (UNHRD, n.d.-h, n.d.-b, n.d.-a). By aligning its operations with principles of partnership, cost efficiency, and responsiveness, UNHRD has positioned itself as a trusted shared platform that facilitates collaboration among a diverse range of humanitarian actors (UNHRD, n.d.-f).

In line with its 2022–2025 strategy, UNHRD conducted a comprehensive organizational review in 2023, with support from WFP Human Resources (UNHRD, n.d.-f). This review focused on harmonizing team structures across the global network and identifying long-term approaches to skills development and talent management (UNHRD, n.d.-f). The revised organizational structure was scheduled to be rolled out in 2024, further reinforcing UNHRD's commitment to operational effectiveness and strategic alignment across its hubs (UNHRD, n.d.-f).

UNHRD also provides clear operational guidance to organizations seeking to use its services and facilities (UNHRD, n.d.-d). The "Standard Operating Procedures" document defines user roles and responsibilities, outlines available services, and describes financial procedures, stock management practices, and logistics processes, thereby enhancing transparency and predictability in administrative and operational interactions (UNHRD, n.d.-d). By supporting consistent use of UNHRD resources, these procedures contribute to cost savings in storage, procurement, and transportation (Mochizuki et al., 2015).

Empirical studies further illustrate the value proposition of UNHRD for participating organizations. Interviews conducted with humanitarian organizations identified cost savings as the primary motivation for joining the network, and in some cases the sole reason for participation (Toyasaki et al., 2017). The ability to exchange relief stocks was also frequently cited, as it provides additional operational flexibility and risk mitigation in the event of supply shortages (Mochizuki et al., 2015). Other organizations reported joining UNHRD to strengthen their collaborative profile and enhance their attractiveness to donors through association with a recognized shared logistics platform (Mochizuki et al., 2015).

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2. UN Logistics Cluster

2.1 Overview

The UN Logistics Cluster was established in 2005 under the UN Humanitarian Reform Agenda, a broader initiative aimed at improving the coordination, predictability, and accountability of humanitarian responses (Besiou & Van Wassenhove, 2020; UNHRD, n.d.). As part of this reform, the Inter-Agency Standing Committee (IASC) introduced the Cluster Approach and designated the WFP as the global lead agency for the Logistics Cluster, reflecting its operational expertise in large-scale humanitarian logistics (Logistics Cluster, n.d.-a; WFP, n.d.).

The Logistics Cluster is not a formal organization with membership fees or restrictive entry requirements, but rather a community of partners engaged in humanitarian logistics coordination (Logistics Cluster, 2021; WFP, n.d.). Any humanitarian actor may engage with the Logistics Cluster at the global or country level (Tatham et al., 2017; WFP, n.d.). In 2023, the Cluster supported 934 partners and stakeholders, including non-governmental organizations (61%), governmental entities (19%), private sector actors (5%), and UN organizations (4%) (Logistics Cluster, 2023).

The core services provided by the Logistics Cluster include coordinating humanitarian logistics activities, facilitating access to common logistics services such as transportation and warehousing, and delivering critical information management support (Besiou & Van Wassenhove, 2020; WFP, n.d.). These services are primarily activated during crises in which national logistics capacities are exceeded and WFP assumes its role as provider of last resort (Logistics Cluster, 2021). Beyond emergency response, the Logistics Cluster also plays an active role in preparedness, training, capacity-building, and post-crisis learning initiatives (Logistics Cluster, n.d.-d, n.d.-c; WFP, n.d.). Specialized digital tools, such as the Logistics Cluster App and the LogIE platform, support real-time information sharing, operational coordination, and situational awareness among humanitarian actors (Logistics Cluster, n.d.-b, n.d.-c).

Governance of the Logistics Cluster is organized through a tiered management structure (Logistics Cluster, 2021). As the Cluster Lead Agency (CLA), WFP facilitates Logistics Cluster activities by allocating resources at both global and country levels (Logistics Cluster, 2021). The Global Logistics Cluster Support Team (GLC ST), hosted by WFP in Rome, provides strategic coordination and implementation support at the global level (Logistics Cluster, n.d.-a, 2021). Strategic guidance is provided by the Strategic Advisory Group (SAG), which includes WFP and selected partner organizations and represents the broader Logistics Cluster community (Logistics Cluster, 2021). At the country level, Logistics Cluster Support Teams facilitate operational coordination, with leadership arrangements adapted to the specific operational context (Logistics Cluster, 2021).

The Logistics Cluster is funded entirely through voluntary contributions (Landmann & Ślusarczyk, 2022). Between 2019 and 2021, WFP's humanitarian logistics funding increased by 18.6%, rising from over USD 8 billion to USD 9.5 billion (Landmann & Ślusarczyk, 2022). Until 2025, the United States was consistently the largest donor, followed by Germany, Canada, Japan, and a growing number of private donors, whose contributions more than doubled during the same period (Landmann & Ślusarczyk, 2022). No more recent funding data could be identified.

2.2 Benefits

The Logistics Cluster delivers substantial benefits to participating organizations by enabling more efficient, coordinated, and predictable humanitarian logistics operations (Logistics Cluster, 2021). As a neutral coordination platform, it allows a wide range of humanitarian actors to align logistics activities, share critical operational information, and reduce duplication during emergency responses (Landmann & Ślusarczyk, 2022; Logistics Cluster, 2021; Tabaklar et al., 2021).

One of the most valued benefits for partners is access to shared logistics services, including warehousing, air and land transportation, and customs clearance support (Landmann & Ślusarczyk, 2022; Tabaklar et al., 2021). These services are particularly important for smaller non-governmental organizations and national partners, which often lack the infrastructure, resources, or funding required to manage complex logistics operations independently (Ruesch et al., 2022).

Partners also benefit from improved access to real-time operational information through platforms such as the Logistics Cluster App and the LogIE platform, which provide updates on road accessibility, storage capacity, and service availability (Logistics Cluster, n.d.-b, n.d.-c). This increased transparency supports informed decision-making,

facilitates coordination among actors, and helps minimize delays and operational inefficiencies (Logistics Cluster, n.d.-b).

Training and capacity-building activities represent another core benefit of the Logistics Cluster's service offering (Logistics Cluster, n.d.-d). In 2023, more than 2,000 staff from partner organizations participated in training courses delivered by the Logistics Cluster (Logistics Cluster, 2023). These programs strengthen operational readiness, enhance interoperability between organizations, and contribute to building local capacity to lead and manage future humanitarian responses (Logistics Cluster, n.d.-d).

The Logistics Cluster also facilitates strategic partnerships with private-sector logistics companies, such as UPS and Maersk (Tabaklar et al., 2021). These partnerships provide humanitarian organizations with access to advanced logistics capabilities and more sustainable logistics practices that would otherwise be difficult or costly to implement independently (Tabaklar et al., 2021). In parallel, the Logistics Cluster places strong emphasis on engaging local partners, whose knowledge of regulatory frameworks, cultural contexts, and local operating conditions enhances situational assessments and accelerates operational decision-making (Tabaklar et al., 2021).

Finally, governance mechanisms such as the Strategic Advisory Group (SAG) and Global Logistics Meetings provide partners with formal channels to contribute to the Cluster's strategic direction and priority-setting processes, reinforcing transparency, inclusiveness, and collective ownership of coordination efforts (Logistics Cluster, 2021).

2.3 Challenges

Despite its strengths, the Logistics Cluster faces several challenges related to governance, coordination, funding, and stakeholder dynamics. Coordinating a large and diverse network of partner organizations is inherently complex and requires robust mechanisms to align differing mandates, priorities, and operational approaches (Landmann & Ślusarczyk, 2022).

A central challenge is the Logistics Cluster's reliance on voluntary donor contributions, which exposes it to fluctuations in political priorities and funding cycles (Landmann & Ślusarczyk, 2022). External shocks, such as the COVID-19 pandemic, have led to reduced contributions from some governments, while operational costs and humanitarian needs have increased simultaneously (Landmann & Ślusarczyk, 2022). In resource-constrained environments, this funding uncertainty can intensify competition for shared logistics assets, such as transportation or warehousing, and reduce incentives for information sharing and collaboration (Ruesch et al., 2022). As a result, some actors may withhold information or limit cooperation out of concern for maintaining their own operational capacity (Ruesch et al., 2022).

Another significant challenge relates to the dual role of WFP as both an operational humanitarian agency and the lead agency of the Logistics Cluster (Ruesch et al., 2022). While WFP's operational capacity supports the Cluster's effectiveness, this dual role can create real or perceived conflicts of interest when WFP must balance its own logistics needs with its responsibility to act as a neutral coordinator (Ruesch et al., 2022). Such perceptions may undermine trust among partners and reduce confidence in the impartiality of coordination mechanisms (Ruesch et al., 2022).

Effective coordination during emergencies depends on timely access to high-quality logistics information, including data on road conditions, infrastructure status, and transport capacity (Jahre & Jensen, 2010; Ruesch et al., 2022). However, collecting, validating, and sharing this information in real time remains challenging, as much of the relevant data is held by non-logistics actors or organizations that may lack incentives, capacity, or systems to share it effectively (Jahre & Jensen, 2010). Addressing this challenge requires stronger outreach, improved information-sharing practices, and greater mutual understanding among the various actors involved (Ruesch et al., 2022).

Finally, local non-governmental organizations and national partners, often among the first responders in humanitarian crises, may be insufficiently integrated into cluster coordination processes (Ruesch et al., 2022). These actors can feel underrepresented or intimidated in coordination meetings dominated by larger international organizations, limiting their participation (Ruesch et al., 2022). As a consequence, valuable local knowledge and contextual insights may not be fully captured, reducing the relevance and effectiveness of coordination outcomes (Ruesch et al., 2022).

2.4 Learnings

A key factor underlying the effectiveness of the Logistics Cluster is its emphasis on neutral and facilitative leadership, particularly at the field level (Ruesch et al., 2022). While WFP serves as the Cluster Lead Agency, the perceived

legitimacy and effectiveness of the Logistics Cluster often depend on the extent to which cluster coordinators operate independently, transparently, and impartially (Ruesch et al., 2022). When WFP staff clearly distinguish their coordination responsibilities from their operational roles, they are more readily perceived as honest brokers, which strengthens trust and encourages active engagement from partner organizations (Ruesch et al., 2022). This participatory and facilitative leadership style, rather than a hierarchical or top-down approach, is widely regarded as essential for effective coordination in humanitarian settings (Ruesch et al., 2022).

Another important lesson concerns the increasing emphasis on engaging local partners in planning, training, and decision-making processes (Ruesch et al., 2022). The inclusion of local actors enhances both the responsiveness and the legitimacy of humanitarian interventions by incorporating contextual knowledge and locally grounded perspectives (Ruesch et al., 2022). While the Logistics Cluster has not always been successful in achieving meaningful inclusion, recognition of these shortcomings has led to concrete improvements, such as inviting local non-governmental organizations to global coordination meetings and expanding outreach efforts (Ruesch et al., 2022).

The Logistics Cluster has also institutionalized systematic lessons-learned processes following major operations, creating structured feedback loops that support continuous learning and iterative improvement (Tabaklar et al., 2021). These reviews collect input from participating organizations and assess both operational successes and gaps, ensuring that insights from past responses inform future planning and coordination efforts (Tabaklar et al., 2021).

Humanitarian operations are inherently characterized by “coopetition,” defined as the simultaneous coexistence of cooperation and competition among organizations (Schiffling et al., 2020; Ruesch et al., 2022). This dynamic is particularly pronounced in contexts where actors must collaborate operationally while competing for funding, visibility, or donor attention (Ruesch et al., 2022). The Logistics Cluster manages these tensions by maintaining a strong focus on shared operational objectives, transparent decision-making processes, and neutral facilitation (Ruesch et al., 2022). Transparency plays a central role in this approach, as clear communication about decisions helps mitigate distrust and manage disagreements when they arise (Ruesch et al., 2022).

Given the often short-lived and rapidly evolving nature of humanitarian operations, the ability to establish trust quickly is critical (Ruesch et al., 2022; Schiffling et al., 2020). The Logistics Cluster supports rapid trust-building through clearly defined roles, predictable coordination mechanisms, and open communication channels (Ruesch et al., 2022). Avoiding perceptions of self-interest is particularly important in this context, as even minor doubts regarding impartiality can undermine coordination effectiveness (Ruesch et al., 2022).

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3. UN Global Marketplace (UNGM)

3.1 Overview

The UN Global Marketplace (UNGM) is the official procurement portal of the United Nations system, designed to connect procurement staff of UN agencies with the global supplier community (UNGM, n.d.-a). It was initiated in the late 1990s under the inter-agency procurement working group, now known as the High-Level Committee on Management's Procurement Network (UNGM, 2023).

The original purpose of UNGM was to provide suppliers with a single point of entry to the UN procurement market, consolidate individual UN agencies' supplier rosters into a shared database, and create a global sourcing platform for the UN system. Over time, UNGM has evolved to respond more effectively to organizational needs. Today, under a mandate from the United Nations General Assembly (UNGA), the platform is used to enhance transparency, harmonize procurement practices across UN agencies, simplify supplier registration processes, increase access for vendors from developing countries, and serve as a common global procurement portal for the UN system (UNGM, 2023).

UNGM does not conduct procurement activities itself. Rather, it functions as a shared digital infrastructure that connects an international network of businesses with UN agencies and supports procurement processes through a range of standardized services. A core function of UNGM is centralized supplier registration. Suppliers register once on the platform and can then be considered by more than 30 UN agencies, replacing the need to complete separate registration processes for each organization (UNGM, n.d.-a). The registration system is tiered: basic registration is sufficient for most agencies, while higher registration levels (Level 1 and Level 2) are required by some agencies for larger or more complex contracts. These higher levels typically require additional documentation, such as financial statements or evidence of past contracts. Registered vendors are automatically matched with UN organizations seeking relevant goods or services (WIPO, 2018).

UNGM also supports procurement by publishing tender notices and opportunity alerts. Vendors can subscribe to notifications based on selected product or service categories and receive updates on newly issued tenders, awarded contracts, and forthcoming procurement opportunities (UNGM, n.d.-b). This functionality improves market transparency and allows suppliers to better anticipate and respond to UN procurement needs.

Another key function of UNGM is its role as a shared supplier database and due diligence tool for procurement officers. The platform hosts over 500,000 registered suppliers and individual consultants worldwide (UNGM, n.d.-a). UN staff with authorized access can use UNGM to conduct due diligence checks, including verifying whether suppliers appear on UN or government sanctions lists, thereby supporting risk management and compliance across agencies (UNGM, n.d.-a).

UNGM further acts as a knowledge-sharing and market intelligence hub through its Knowledge Centre (UNGM, n.d.-c). This portal disseminates guidance on doing business with individual UN organizations, information on the types of goods and services procured by the UN, procurement manuals such as the UN Procurement Practitioner's Handbook, and resources related to sustainable procurement (UNGM, n.d.-c). UNGM also hosts the Annual Statistical Report (ASR) on UN Procurement, produced by the United Nations Office for Project Services (UNOPS) on behalf of the UN system (UNGM, n.d.-d). Through interactive dashboards and downloadable reports, the ASR provides data on total UN procurement spending, supplier country distribution, and sectoral trends, supporting transparency and evidence-based decision-making for both UN procurement staff and suppliers.

Rather than conducting transactions directly, UNGM operates as an interface between suppliers and individual agencies' e-procurement systems. Suppliers may identify tender opportunities on UNGM and are then redirected to agency-specific procurement platforms to submit bids (UNGM, 2016). These agency platforms are managed independently, and technical support for them is provided by the respective UN organization rather than UNGM itself.

Finally, UNGM plays an active role in trade promotion and supplier outreach. It collaborates with Trade Promotion Organizations (TPOs), including national trade ministries, chambers of commerce, and export promotion agencies, which can register on UNGM to access supplier data, organize procurement seminars using UNGM's event management tools, and support local businesses in navigating UN procurement processes (UNGM, n.d.-a). UNGM also participates in and facilitates international procurement seminars and business briefings aimed at increasing supplier awareness of UN procurement opportunities, particularly in developing and transition economies (UNGM, n.d.-a). These

outreach activities align with UNGM's mandate to improve accessibility, inclusiveness, and transparency in UN procurement.

3.2 Benefits

UNGM has generated substantial benefits for both UN organizations and the supplier community through its centralized and shared-service approach. One of its primary advantages is increased efficiency. By enabling suppliers to register once and share their information across multiple UN agencies, UNGM significantly reduces duplication in vendor registration processes, lowering administrative burdens for both suppliers and procurement staff (UNGM, n.d.-a).

UNGM also enhances transparency across UN procurement activities. Through open access to procurement information, common vetting mechanisms, and shared supplier data, the platform improves visibility into procurement processes and supports consistent due diligence practices across agencies (UNGM, n.d.-a).

Accessibility is another key benefit of UNGM. The platform enables suppliers from around the world to engage with UN procurement opportunities through a single entry point, lowering barriers to participation (UNGM, n.d.-a). This is particularly beneficial for suppliers from developing countries.

In addition, UNGM supports standardization across the UN system by promoting unified supplier registration and vendor evaluation processes (UNGM, n.d.-a). This harmonization helps reduce inconsistencies between agencies and facilitates smoother collaboration among procurement units.

UNGM further enables inter-agency collaboration and joint procurement. By providing visibility into supplier information and existing contracts, the platform facilitates mechanisms such as piggybacking on Long-Term Agreements (LTAs), allowing agencies to leverage one another's procurement arrangements and achieve greater economies of scale (UNGM, n.d.-a).

Finally, UNGM contributes to strategic alignment across the UN system by supporting procurement practices that are consistent with broader UN objectives, including the Sustainable Development Goals (SDGs) and ongoing procurement reform initiatives (UNGM, n.d.-e). In doing so, the platform reinforces coherence between operational procurement activities and system-wide policy priorities.

3.3 Challenges

Despite its central role in enhancing transparency and harmonization, UNGM faces several structural and operational challenges that still limit its contribution to deeper supply chain interoperability across the UN system.

A key limitation is that UNGM does not execute procurement transactions itself but functions primarily as a centralized directory and information-sharing platform. While it provides a single point of access for supplier registration and tender visibility, many UN agencies continue to operate their own e-procurement platforms, which are only partially integrated with UNGM or operate as standalone systems. As a result, suppliers may identify procurement opportunities on UNGM but are then redirected to agency-specific platforms to submit bids, requiring them to navigate multiple systems with different technical requirements and user interfaces. This fragmentation can lead to confusion, increase transaction costs for suppliers, and reduce the overall efficiency of the procurement process (UNGM, 2025).

Related to this, technical integration between UNGM and agency-specific e-procurement systems remains uneven. While some organizations have established application programming interfaces (APIs) or automated data exchanges with UNGM (UNGM, n.d.-f), others rely on manual or limited data sharing. This uneven level of integration constrains the platform's ability to serve as a fully interoperable procurement backbone and reinforces the persistence of agency-specific procurement practices (UNGM, 2025).

More broadly, these challenges reflect a long-standing issue within the UN system: the fragmentation of procurement governance and systems across agencies. Previous system-wide reviews have highlighted that UN procurement has historically been managed through decentralized structures, with agencies developing their own tools, procedures, and platforms. While UNGM was created in part to address this fragmentation, full harmonization has proven difficult due to institutional autonomy, differing mandates, and varying risk and compliance requirements across organizations (UN Joint Inspection Unit, 2011).

Finally, research on e-procurement adoption within the UN system suggests that differences in digital maturity among agencies and suppliers also limit the effectiveness of common procurement platforms. Variations in technological capacity, access to digital tools, and familiarity with e-procurement processes can hinder consistent use of UNGM, particularly for suppliers from developing countries and smaller organizations. These factors further complicate efforts to achieve seamless interoperability across the procurement landscape (Walker and Harland, 2008).

Together, these challenges indicate that while UNGM has made significant progress in improving transparency and access to UN procurement, its ability to fully enable interoperability is constrained by broader institutional, technical, and governance factors that extend beyond the platform itself.

3.4 Learnings

The implementation and evolution of UNGM offer several important lessons for supply chain collaboration and interoperability across the UN system. First, UNGM demonstrates that a common, system-wide platform can significantly improve harmonization while preserving agency autonomy. By consolidating supplier registration and tender visibility into a single entry point, UNGM has reduced duplication, increased transparency, and lowered barriers for suppliers seeking to engage with multiple UN agencies. This confirms that shared digital infrastructure can deliver tangible efficiency gains even within a highly decentralized institutional environment.

Second, UNGM has contributed to enabling inter-agency collaboration in procurement by improving access to information and supporting mutual recognition mechanisms. By increasing visibility over suppliers, tenders, and awarded contracts, the platform has facilitated practices such as piggybacking on LTAs, allowing agencies to leverage existing contracts rather than duplicating procurement processes. While UNGM does not manage contracts directly, its role as a shared information backbone has reduced transaction costs associated with inter-agency cooperation.

At the same time, UNGM highlights the limits of platform-based interoperability when governance arrangements and incentives are not fully aligned. Many agencies continue to operate standalone procurement systems with limited integration into UNGM, which constrains the platform's potential to enable seamless interoperability. This suggests that technical solutions must be complemented by clear mandates, stronger incentives for participation, and greater institutional commitment to data sharing and collaboration.

Overall, UNGM provides a practical example of how interoperability can be strengthened incrementally through pragmatic, modular approaches. Its experience shows that meaningful progress is most likely when shared platforms deliver early benefits, build trust among users, and gradually expand their scope, rather than relying on large-scale, centrally imposed reforms.

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4. UN Humanitarian Air Service (UNHAS)

4.1 Overview

The UN Humanitarian Air Service (UNHAS) is a critical component of the global humanitarian supply chain, providing essential air transport services to support humanitarian operations in some of the world's most challenging environments (WFP, 2024b; Dorn & Cross, 2015). Operated and managed by the WFP, UNHAS was established in 2004 in response to the growing need for a reliable, neutral, and coordinated air transport system for humanitarian personnel and light cargo (WFP, n.d.; WFP, 2024b; Landmann & Ślusarczyk, 2024). Its primary objective is to ensure timely, safe, and effective access to hard-to-reach locations, thereby enabling life-saving humanitarian assistance (WFP, n.d.; WFP, 2024b).

UNHAS primarily operates in contexts where surface transport is unsafe, unreliable, or entirely unavailable (WFP, n.d.). This includes conflict-affected settings such as Sudan and the Democratic Republic of the Congo, as well as disaster-prone contexts such as Haiti and Madagascar, where infrastructure is often damaged or inaccessible (WFP, n.d.; WFP, 2024b). In many of these environments, UNHAS represents the only viable means of transportation for humanitarian actors (WFP, 2024b).

In 2023, UNHAS operated in 21 countries across three continents, deploying a fleet of 144 aircraft, including helicopters (WFP, 2024b). During that year, the service conducted approximately 48,000 flights, transported more than 388,000 passengers and 4,800 metric tons of humanitarian cargo, and facilitated 1,555 medical and security evacuations across 437 destinations (WFP, 2024b).

UNHAS provides a broad range of aviation services, including scheduled and ad hoc passenger flights, emergency evacuations, rapid assessments, and high-level missions (WFP, 2024b). These services are accessible to all actors within the humanitarian community, including UN agencies, national and international non-governmental organizations (NGOs), donor representatives, and the diplomatic community (WFP, 2024b). In 2023 alone, UNHAS supported 647 organizations worldwide (WFP, 2024b).

Governance of UNHAS operations is ensured through Steering Committees and User Group Committees at the country level (WFP, 2023). Steering Committees, chaired by the UN Humanitarian Coordinator and co-chaired by a WFP Country Representative, provide strategic and operational guidance, including decisions related to funding models, route networks, and service prioritization (WFP, 2023). User Group Committees comprise representatives of participating organizations and serve as a platform to gather user feedback and assess operational requirements (WFP, 2023).

To manage demand and ensure equitable access to limited aviation capacity, UNHAS applies a Passenger Prioritization System (WFP, 2023). This system prioritizes emergency medical evacuations, followed by humanitarian personnel based on mission criticality, with diplomatic or other ancillary users accommodated when capacity allows (WFP, 2023).

From a financial perspective, UNHAS operates under a mixed funding model combining donor contributions, cost-recovery through user fees, and carry-over balances from previous years (WFP, 2023). In 2023, UNHAS operated with a total budget of USD 410 million, including USD 251 million in donor contributions from 24 donors (WFP, 2024a; WFP, 2024b). Additional funding included USD 132.9 million from prior-year balances and USD 92 million generated through cost-recovery mechanisms, primarily ticket fees paid by users (WFP, 2024a; WFP, 2024b). A centralized funding mechanism has been introduced to improve financial predictability and flexibility, enabling soft earmarking and rapid allocation of funds in response to sudden-onset emergencies or operations without approved strategic plans (WFP, 2023).

UNHAS continues to innovate through digital transformation initiatives, notably the United Nations Booking Hub, an online platform that streamlines flight bookings and is accessible via mobile devices (WFP, 2024a; WFP, 2024b). By 2023, all 21 UNHAS country operations had been integrated into the platform, with further expansion planned in 2024 (WFP, 2024b).

Environmental sustainability, diversity and inclusion, and digitalization are articulated as strategic priorities for UNHAS (WFP, 2024b). In support of these objectives, UNHAS has introduced training programs on aviation fundamentals and sustainability for WFP partners, civil aviation authorities, and other stakeholders (WFP, 2024a; WFP, 2024b).

4.2 Benefits

UNHAS delivers a range of benefits to the humanitarian ecosystem, most notably by enabling access to crisis-affected populations in locations that are otherwise unreachable (WFP, 2024a). By providing rapid, safe, and reliable air transport services, UNHAS plays a critical role in supporting the delivery of humanitarian assistance and the implementation of life-saving projects in hard-to-reach and insecure environments (WFP, 2024a). In many operational contexts, UNHAS represents the only viable transport option for humanitarian personnel and essential light cargo.

A key advantage of UNHAS lies in its shared service model. By centralizing aviation services for multiple humanitarian actors, UNHAS eliminates the need for individual agencies to operate and manage separate air fleets (WFP, 2024a). This approach significantly reduces duplication, optimizes the use of limited aviation assets, and generates cost savings for participating organizations (WFP, 2024a). At the system level, it also enhances coordination and predictability by providing a common aviation platform accessible to the entire humanitarian community.

UNHAS further strengthens emergency response capacity by offering rapid and flexible aviation support during sudden-onset crises (WFP, 2024a). Its services include emergency medical and security evacuations, rapid assessment missions, and the transport of time-sensitive humanitarian cargo, all of which are critical in the early phases of emergencies (WFP, 2024a). The introduction of the United Nations Booking Hub has further enhanced operational efficiency by streamlining the booking process and allowing users to plan, track, and manage travel in a more transparent and user-friendly manner (WFP, 2024b).

Beyond immediate operational support, UNHAS contributes to longer-term capacity building within national aviation sectors. Through training programs focused on aviation safety, security, and operations, UNHAS helps strengthen local institutional capacity and reinforce international aviation standards (WFP, 2024a). In 2023, a total of 1,392 individuals received training on topics such as international civil aviation security and responses to security threats, supporting both humanitarian operations and host-country aviation systems (WFP, 2024a).

User satisfaction levels further illustrate the value of UNHAS services. In 2023, the global user satisfaction rate reached 96 percent, reflecting consistently high service quality and strong confidence among humanitarian partners (WFP, 2024a).

In addition, UNHAS supports the rehabilitation and maintenance of local aviation infrastructure, including airstrips, and provides technical assistance to national aviation authorities in host countries (WFP, 2024a). These activities improve physical access and operational safety, benefiting not only UNHAS users but also the broader humanitarian community operating in these contexts (WFP, 2024a).

4.3 Challenges

UNHAS faces a range of operational and structural challenges, with funding constraints representing the most pressing concern (WFP, 2024a; Landmann & Ślusarczyk, 2024). Although UNHAS benefits from substantial donor contributions, recurring funding shortfalls regularly threaten the continuity of operations (Tah, 2024). In 2024, WFP projected a funding gap of USD 55 million to sustain UNHAS activities in 17 countries, placing several critical air routes at risk (Tah, 2024). The heavy reliance on voluntary donor funding further exacerbates this vulnerability and limits the predictability and stability of operations (WFP, 2023).
At the same time, demand for UNHAS services continues to grow as armed conflicts and climate-related disasters increase in frequency and intensity (WFP, 2023). However, existing funding models do not always scale in line with this rising demand, creating structural tensions between operational needs and available resources (WFP, 2023). This has prompted calls for a reassessment of UNHAS financing arrangements to ensure long-term sustainability and operational resilience (WFP, 2023). Dependence on a small number of major donors also represents a significant risk, particularly in the event of shifting political priorities or funding withdrawals (Landmann & Ślusarczyk, 2024). This risk is especially salient given that USAID’s Bureau for Humanitarian Assistance (BHA) was the largest donor to UNHAS in 2023 (WFP, 2024a; Office of Inspector General, n.d.).

Forecasting future demand remains inherently challenging. The unpredictable nature of humanitarian crises, whether driven by natural hazards, armed conflict, or epidemiological outbreaks, makes it difficult to anticipate operational requirements and align them with funding availability (Landmann & Ślusarczyk, 2024). This uncertainty complicates both strategic planning and resource allocation for UNHAS operations.

Operating in highly volatile environments also exposes UNHAS staff and aviation assets to significant security risks, including armed conflict, improvised explosive devices, and restrictions on airspace access (WFP, 2024a). These risks are mitigated through the work of UNHAS's Aviation Security unit, which conducts security assessments, delivers safety training, and implements field-level security protocols (WFP, 2024a). Nevertheless, residual risks remain inherent to humanitarian aviation.

Coordination challenges further arise from the diverse range of stakeholders served by UNHAS (WFP, 2024a). High demand combined with competing operational priorities can complicate flight scheduling and route planning, requiring continuous trade-offs between efficiency, equity, and urgency (WFP, 2024a). Maintaining neutrality while responding flexibly to urgent needs remains an ongoing challenge.

Finally, in countries characterized by fragmented governance or multiple competing authorities, such as Yemen, access constraints and administrative delays can impede UNHAS operations (WFP, 2024a). These challenges can affect the timeliness of humanitarian response and reduce the overall effectiveness of air transport services in highly complex political environments (WFP, 2024a).

4.4 Learnings

UNHAS offers several replicable lessons for humanitarian supply chain collaboration. The introduction of a centralized funding approach that manages earmarked contributions has strengthened financial flexibility and improved the service's ability to respond rapidly to operational demands (WFP, 2024a). This mechanism enables underfunded or emerging operations to receive timely support, even in the absence of country-specific strategic plans (WFP, 2024a).

Its two-tier governance structure supports inclusivity while preserving technical rigor (WFP, 2023). User Group Committees allow service users to influence operational priorities, while Steering Committees ensure professional aviation oversight and accountability (WFP, 2023). This balance enhances transparency, responsiveness, and shared ownership (WFP, 2023). By maintaining neutrality, impartiality, and a clear service-oriented mandate, UNHAS avoids preferential treatment and focuses decision-making on humanitarian needs, thereby reinforcing trust and legitimacy among stakeholders (WFP, 2023).

UNHAS also illustrates the value of digital transformation through the UN Booking Hub, which simplifies complex aviation logistics and provides a user-centered interface for managing travel and cargo movements (WFP, 2021). Finally, UNHAS exemplifies the "One UN" approach by coordinating across UN agencies, donors, and local actors, demonstrating how collective action can amplify impact and improve the effectiveness of humanitarian operations (Tah, 2024).

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5. UN Fleet

5.1 Overview

UN Fleet is a centralized service designed to streamline light vehicle leasing and fleet management across the United Nations system (WFP & UNHCR, n.d.). It was developed in response to the UN's need for a more efficient, standardized, and sustainable approach to fleet operations (WFP & UNHCR, n.d.). The service builds on the extensive experience of the WFP and the United Nations High Commissioner for Refugees (UNHCR), both of which have long operated self-sustaining vehicle leasing schemes at scale (UNHCR & WFP, 2022; Kunz et al., 2015).

The primary objective of UN Fleet is to reduce duplication as well as administrative and transaction costs by offering a unified fleet management model to participating agencies (WFP & UNHCR, n.d.). The service covers the full vehicle lifecycle, including procurement, vehicle preparation, and end-of-life disposal (WFP & UNHCR, n.d.). Through this centralized approach, UN Fleet supports the UN Reform agenda by promoting greater coherence, accountability, and operational effectiveness across the system. It also contributes to the 2030 Agenda for Sustainable Development by reducing emissions, improving road safety, and ensuring that vehicle specifications are better aligned with operational requirements (WFP & UNHCR, n.d.; United Nations, n.d.).

UN Fleet services are available to any UN agency that signs a Service Agreement at headquarters level (WFP & UNHCR, n.d.). Once the agreement is in place, country offices can directly request and manage vehicle leases through the UN Fleet Portal (WFP & UNHCR, n.d.). The platform provides access to a standardized catalogue of vehicles and services and, over time, aims to support operations through additional tools such as vehicle tracking, training materials, and fleet optimization support (WFP & UNHCR, n.d.).

The UN Fleet funding model is self-sustaining and does not require upfront capital investment from participating agencies (WFP & UNHCR, n.d.). Instead, agencies pay predictable monthly lease rates that cover the full range of fleet services, with contract terms that can be adapted to specific operational needs (WFP & UNHCR, n.d.).

5.2 Benefits

Leasing vehicles through UN Fleet delivers tangible benefits to the supply chains of participating UN agencies by directly enhancing operational efficiency and indirectly improving outcomes for affected populations (UN Fleet, 2023a). By centralizing fleet management, UN Fleet reduces fragmentation across agencies and enables more predictable, reliable, and cost-effective mobility in diverse operational contexts.

One of the primary advantages is the removal of the vehicle procurement burden from individual agencies. Through its centralized system and global fleet management expertise, UN Fleet selects vehicles that are optimized for a wide range of operating environments, from urban settings to remote and high-risk locations (UNHCR & WFP, 2022; UN Fleet, 2023a). This approach lowers procurement costs, increases operational flexibility, and ensures that vehicles are fit for purpose, thereby supporting faster and more reliable service delivery to end beneficiaries (UN Fleet, 2023a).

The UN Fleet Portal further streamlines vehicle acquisition by offering a single digital entry point for leasing requests and follow-up actions, including tracking, shipping, and payments (UN Fleet, 2023a). This one-stop-shop model reduces administrative burden, minimizes paperwork, and shortens lead times, enabling country offices to scale or adapt fleet capacity more rapidly in response to changing operational needs (UN Fleet, 2023a).

Significant efficiency gains are achieved through pooled demand and standardized fleet management practices. By leveraging framework agreements with manufacturers, UN Fleet generates economies of scale that reduce procurement costs (Goitsemang & Hoshino, 2024; UN Fleet, 2023a). Operating costs are further lowered through the use of newer, standardized vehicles, which are more reliable and easier to maintain. Environmental performance is also improved, as fleet lifecycles are capped at five years and agencies gain increasing access to hybrid and electric vehicle models (Goitsemang & Hoshino, 2024; UN Fleet, 2023a). In addition, insurance and administrative efforts are minimized, as comprehensive insurance coverage for loss or damage is included and managed centrally by UN Fleet (UN Fleet, 2023a).

Standardization across fleets simplifies maintenance, training, and spare parts management, reducing operational complexity for participating agencies (UN Fleet, 2023a). It also enables vehicles to be reallocated more easily across country offices, particularly during emergencies, without compatibility constraints (UN Fleet, 2023a).

Overall, UN Fleet is expected to generate recurring savings of between USD 17.3 million and USD 28.2 million per year through the combined fleet leasing service, underscoring its potential to deliver sustained efficiency gains across the UN system (Goitsemang & Hoshino, 2024; WFP & UNHCR, n.d.).

5.3 Challenges

A review of available UN documentation indicates that one of the primary challenges faced by UN Fleet has been encouraging broad participation across UN agencies. This challenge is largely linked to the decentralized nature of the UN system, in which agencies operate as legally and operationally independent entities with distinct governance structures, mandates, and operational requirements (United Nations, n.d.). As a result, extensive consultations were required to understand the specific needs, ambitions, and operational constraints of each agency before they could commit to the service (UNHCR & WFP, 2022).

UN Fleet was launched in October 2022, and by the end of its first year of operation, 12 organizations had signed service agreements (Goitsemang & Hoshino, 2024; UNHCR & WFP, 2022). The following agencies signed a service agreement with UN Fleet during its first year of operation (UN Fleet, 2023b):

- World Food Programme (WFP), Founding Member
- United Nations High Commissioner for Refugees (UNHCR), Founding Member
- United Nations Children's Fund (UNICEF)
- World Health Organization (WHO)
- United Nations Population Fund (UNFPA)
- International Organization for Migration (IOM)
- Food and Agriculture Organization of the United Nations (FAO)
- United Nations Office for the Coordination of Humanitarian Affairs (OCHA)
- International Labour Organization (ILO)
- United Nations Office at Nairobi (UNON)
- Department of Operational Support (DOS) for Colombia

By May 2024, a total of 14 entities had signed a Service Level Agreement (SLA) for the service, indicating gradual but steady uptake across the UN system (WFP, 2024a).

From a financial perspective, another significant challenge was securing the capital funds, resources, and additional operational capacity required to establish the service. Although a detailed financial model and estimates of the required capital investment were developed at the outset, mobilizing these resources remained complex, particularly given competing budgetary pressures across the UN system (WFP, 2022). This highlights the difficulty of launching system-wide shared services in a context where upfront investments are required before efficiency gains can be fully realized.

5.4 Learnings

UN Fleet operates in line with the core principles of client satisfaction, cost recovery, and mutual recognition, which were developed under the UN Reform initiative BIG (UNSDG's Business Innovations Strategic Results Group) (UN Fleet, 2023a; WFP & UNHCR, n.d.). These principles underpin UN Fleet's client-oriented approach, ensuring consistent service quality, transparency, and equal treatment across all participating agencies. They also reflect a strong commitment to collaboration and continuous engagement with stakeholders throughout the service lifecycle (UN Fleet, 2023b).

A key success factor consistently highlighted in UN documentation is the neutrality of the service (UN Fleet, 2023a; UNHCR & WFP, 2022). UN Fleet operates independently from any single agency, with staff seconded from WFP and UNHCR but reporting to a dedicated Management Board. This governance arrangement helps safeguard neutrality, reduces perceptions of institutional bias, and reinforces trust among participating agencies (UN Fleet, 2023a).

Trust-building is further supported through the establishment of an Advisory Board composed of representatives from client agencies (UN Fleet, 2023a). This structure provides agencies with a formal mechanism to influence service design, provide feedback, and contribute to continuous improvement. Regular dialogue between UN Fleet and its

clients has proven essential in ensuring that the service remains responsive to diverse operational contexts and evolving agency needs (UN Fleet, 2023a; UN Fleet, 2023b).

Another critical enabler of the service's effectiveness is the UN Fleet Portal, a digital platform that streamlines service delivery and enhances accessibility for users across the UN system (UN Fleet, 2023b). The portal functions as a centralized interface providing standardized access to fleet services, documentation, and performance data, regardless of users' technical background. By leveraging digital tools, UN Fleet has improved operational efficiency, transparency, and data-driven decision-making (UN Fleet, 2023b).

Finally, high levels of user satisfaction provide strong evidence of the service's value. During 2022–2023, UN Fleet achieved an average customer satisfaction score of 4.5 out of 5, indicating that participating agencies view the service as effective, reliable, and beneficial. This reinforces UN Fleet's position as a successful example of a shared service model within the UN system (WFP, 2024a).

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6. UN Mobility

6.1 Overview

UN Mobility is a passenger mobility solution designed to support shared transportation services across UN agencies (Nicolai, 2025). The initiative aims to make ridesharing and inter-agency carpooling the standard approach to passenger mobility for UN personnel, thereby increasing efficiency and reducing duplication across agencies (Nicolai, 2025). By promoting shared use of transport assets, UN Mobility also contributes to broader UN Reform objectives by fostering inter-agency collaboration, optimizing resource utilization, and lowering operational costs (Nicolai, 2025).

The UN Mobility service offering comprises three complementary service models. First, ridesharing enables multiple staff members from the same UN agency to share a single vehicle when travelling to the same or similar destinations with comparable pick-up and drop-off times. This model focuses on optimizing vehicle utilization within individual organizations and reducing the number of trips required for routine movements (Nicolai, 2025).

Second, carpooling allows UN entities to provide transportation services to one another based on available vehicle and driver capacity. Under this model, one agency may offer a vehicle and driver to transport staff from another agency for local trips, such as attending meetings or carrying out field visits within the same city. This inter-agency approach reduces redundant fleet usage and encourages operational collaboration at the local level (Nicolai, 2025).

Third, UN Mobility also supports a combined model that integrates both ridesharing and inter-agency carpooling. This hybrid approach maximizes flexibility by allowing shared vehicle use both within and across agencies, depending on demand and available capacity (Nicolai, 2025).

The service was initiated in 2023 and is being progressively expanded and operationalized through 2025. This expansion includes pilot initiatives such as electric vehicle carpooling in Kenya, implemented by the United Nations Office at Nairobi (UNON), which demonstrates UN Mobility's alignment with sustainability objectives and innovation in shared transport solutions (Nicolai, 2025).

As of 2025, UN Mobility is active in 45 countries and involves more than 250 agencies at the local level (Nicolai, 2025). Through this network, the service supports over 4 million users across 113 countries and more than 1,000 locations. Operations are carried out using a fleet of more than 8,800 vehicles, including 992 armored vehicles, and are supported by 6,728 drivers (Nicolai, 2025; WFP, 2025). These figures illustrate the scale at which UN Mobility operates and its growing role in coordinating passenger transport across the UN system.

Operational governance is structured through Service Level Agreements (SLAs) and dedicated Carpooling Service Agreements, which define roles, responsibilities, and service conditions among participating entities (Nicolai, 2025). The service is financially sustained through a combination of annual subscription fees and a trip-based cost recovery model, ensuring predictability and transparency in funding arrangements (Nicolai, 2025).

To support day-to-day operations and user engagement, UN Mobility relies on an AI-driven chatbot that functions as a single point of contact (SPOC) for users. This tool provides centralized information and 24/7 support, enhancing the overall user experience through automated query resolution and self-service booking options integrated with the UN Booking Hub (Nicolai, 2025).

6.2 Benefits

UN Mobility delivers significant operational and strategic benefits for participating UN entities. A key advantage lies in financial savings generated through time efficiencies and cost avoidance, which amounted to approximately USD 8 million in 2024. Once fully scaled across all UN entities, annual savings are expected to reach between USD 15 and 20 million (Nicolai, 2025; WFP, 2025).

Additional efficiency gains are achieved through improved fleet optimization and rightsizing, which contribute to reduced fuel consumption and lower greenhouse gas emissions (CEB, 2024; UN Mobility, 2024; Nicolai, 2025). The systematic use of ridesharing and carpooling has led to an estimated reduction of 596 metric tons of carbon dioxide emissions in 2024 alone (WFP, 2025), demonstrating the environmental benefits of shared passenger mobility solutions.

To support effective scalability, UN Mobility provides online training modules for participating agencies (Nicolai, 2025). The service also offers UN Mobility Dashboards, which function as a centralized data platform enabling performance monitoring, KPI tracking, data collection, and in-depth analysis (Nicolai, 2025). These dashboards support evidence-based decision-making, enhance vehicle utilization, and facilitate the replication of best practices across UN operations worldwide (Nicolai, 2025).

Beyond efficiency gains, UN Mobility strengthens system-wide coherence and promotes inter-agency collaboration (UN Mobility, 2024). Carpooling arrangements create opportunities for staff from different organizations to interact, exchange perspectives, and build stronger professional relationships across agencies (UN Mobility, 2024).

By reducing administrative and operational burdens associated with passenger transport, the service enables UN entities to redirect resources toward core programmatic and operational activities, thereby increasing internal efficiency (UN Mobility, 2024). Field-level feedback illustrates these benefits in practice: UNICEF in Senegal highlighted improved cost recovery from fixed vehicle costs, directly supporting operational and beneficiary-focused activities; UNESCO emphasized gains in fleet efficiency and environmental protection; and UNDP in Nigeria underscored the reliability of vehicle and driver availability, enabling staff to travel efficiently across the country (Nicolai, 2025). Additional testimonials from field operations further point to improvements in operational effectiveness, efficiency, and environmental sustainability (CEB, 2024).

Overall service quality is reflected in a customer satisfaction score of 4.1 out of 5, indicating a high level of user satisfaction with UN Mobility (Nicolai, 2025).

6.3 Challenges

The publicly available resources do not explicitly document challenges specific to UN Mobility. The absence of documented challenges may reflect the relatively recent implementation of the service and the fact that it is still in a scaling and consolidation phase (Nicolai, 2025). As a result, systematic evaluations of constraints and risks may not yet have been fully captured in the literature.

Based on parallels with comparable shared services within the UN system, such as UN FLEET and other inter-agency mobility or logistics initiatives, it is reasonable to assume that UN Mobility may face similar structural and operational challenges. One likely challenge relates to inter-agency governance. Coordinating passenger mobility across multiple UN entities requires alignment of policies, procedures, and accountability frameworks among organizations with different mandates, operating models, and risk tolerances. Achieving consensus on service standards, cost-sharing arrangements, and prioritization rules can therefore be complex and time-consuming, particularly in decentralized country contexts.

Another potential challenge concerns change management and adoption. Encouraging staff and managers to shift from agency-specific transport arrangements to shared ridesharing and carpooling solutions may require sustained communication, incentives, and leadership support. Resistance to behavioral change, concerns about reliability, security, or scheduling flexibility, and differing organizational cultures may slow uptake in some locations.

Finally, while UN Mobility focuses primarily on optimizing the use of existing vehicle fleets rather than building new ones, scaling the service may still require upfront investments in digital infrastructure, coordination capacity, and support functions. Ensuring adequate resources for system maintenance, user support, and continuous improvement is likely to remain an important consideration as the service expands.

6.4 Learnings

UN Mobility highlights the importance of digital transformation as an enabler of effective inter-agency collaboration. Its success is partly driven by the use of automated processes and digital tools to optimize fleet utilization and passenger mobility across agencies (UN Mobility, 2024). By embedding technology at the core of the service, UN Mobility demonstrates how digital solutions can simplify coordination and improve operational efficiency at scale.

Clear governance arrangements are another key learning. Well-defined Service Level Agreements, combined with structured change management frameworks, support cooperation and manage coopetition among participating agencies (Nicolai, 2025). These mechanisms provide clarity on roles, responsibilities, and cost-sharing, which helps build trust and sustain collaboration across diverse organizational settings. Technological enablers, such as AI-driven

chatbots, further strengthen governance by centralizing knowledge management and offering a consistent user interface for support and information (Nicolai, 2025).

Data-driven decision-making also emerges as a critical success factor. The use of centralized dashboards allows agencies to monitor performance, track key indicators, and improve vehicle utilization in a transparent and comparable manner (Nicolai, 2025). These tools support evidence-based adjustments and facilitate the identification and scaling of best practices across locations.

Capacity-building and user support play an important complementary role. Online training modules lower adoption barriers and help standardize the use of the service across agencies, while the 24/7 chatbot ensures continuous access to assistance and guidance (Nicolai, 2025). Together, these elements contribute to smoother implementation and sustained uptake.

Overall, UN Mobility illustrates how shared mobility services can generate efficiency gains while simultaneously advancing environmental sustainability objectives. By pooling transport resources and promoting ridesharing and carpooling, the initiative demonstrates the potential of collaborative approaches to reduce emissions and optimize resource use across the UN system (UN Mobility, 2024; Nicolai, 2025).

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7. UN International Computing Centre (UNICC)

7.1 Overview

The UN International Computing Centre (UNICC) was established in 1970 by resolution of the United Nations General Assembly, following a joint initiative by the UN, the United Nations Development Programme (UNDP), and the World Health Organization (WHO) to create a common Electronic Data Processing (EDP) facility (UNICC, n.d.-a). The objective was to pool computing resources, reduce duplication, and provide shared information technology services to UN entities. Over time, UNICC has evolved into a central IT service provider for the UN system and now supports more than 100 partner organizations worldwide, delivering a broad portfolio of digital solutions and services (UNICC, n.d.-b). Despite this extensive mandate, not all UN agencies fully access or make use of the complete range of services offered by UNICC (UNICC, n.d.-a).

UNICC operates under a formal governance structure designed to ensure representation and accountability across its partner organizations. Strategic oversight is provided by a Management Committee, composed of one representative from each UN partner organization (UNICC, 2023a). An Advisory Group supports the Management Committee and includes representatives from the five largest partner organizations (UNICC, 2023a). This governance framework is intended to balance inclusivity with effective decision-making and strategic alignment.

UNICC offers a comprehensive portfolio of IT services covering digital infrastructure and advanced technology capabilities (UNICC, n.d.-c). In the area of cybersecurity, services include risk assessments, governance support, and identity and access management solutions. Its data and artificial intelligence offerings encompass data governance frameworks, advanced analytics, and database services. UNICC also provides cloud services, including management of Amazon Web Services (AWS), Microsoft M365 environments, and cloud hosting solutions. Network and infrastructure services cover connectivity, server management, and data backup, while client services include application development, process automation, learning platforms, and communication tools. In addition, UNICC delivers platform services such as Enterprise Resource Planning (ERP) systems and Business Intelligence (BI) platforms, supporting core administrative and operational processes across UN entities (UNICC, n.d.-c).

Through this integrated service offering, UNICC plays a central role in enabling digital interoperability, operational efficiency, and shared service delivery across the UN system.

7.2 Benefits

Partnering with the UNICC offers several strategic and operational benefits for UN agencies. A core advantage is access to trusted digital infrastructure that supports secure and reliable operations across the UN system. In particular, UNICC provides access to the UN's common Public Key Infrastructure (PKI), which enhances secure digital authentication and supports trustworthy online communications between agencies and external partners (UNICC, 2022a). This shared infrastructure reduces duplication while strengthening system-wide cybersecurity and digital trust.

Collaboration with UNICC also supports alignment with the Sustainable Development Goals (SDGs) by enabling agencies to adopt shared digital solutions that underpin broader UN development and policy priorities. Through common platforms and standardized IT services, agencies can more easily align their operational processes with system-wide objectives related to efficiency, transparency, and sustainability.

UNICC further enables access to innovative digital tools designed specifically for the UN context. Examples include UNifyHR, a generative AI–powered solution aimed at streamlining human resources operations and supporting policy management (UNICC, 2024a). Another key offering is UNIQCloud, an internal cloud solution tailored for UN agencies that promotes digital sovereignty, secure data management, and compliance with UN-specific requirements (UNICC, 2025). These tools allow agencies to benefit from advanced technologies without developing and maintaining bespoke solutions independently.

A significant benefit of working with UNICC lies in its implementation experience across major UN organizations. UNICC has successfully deployed Microsoft 365 Teams and cloud solutions for agencies such as the World Intellectual Property Organization (WIPO) (UNICC, 2023b). It also has long-standing experience in supporting and hosting SAP systems for key UN entities, including the WFP, the Comprehensive Nuclear-Test-Ban Treaty Organization (CTBTO), the United Nations Joint Staff Pension Fund (UNJSPF), and the United Nations Relief and Works Agency for Palestine Refugees in the Near East (UNRWA) (UNICC, 2022b).

UNICC also plays an important role in supporting ERP integration across the UN system. By hosting the Umoja ERP platform, UNICC enables more efficient and transparent management of financial, human, and physical resources, supporting harmonization and interoperability across agencies (UNICC, 2022b).

Finally, UNICC contributes to strengthening digital interdependence across the UN system by hosting the "Common Secure Conference," a forum designed to foster collaboration, share best practices, and advance collective digital transformation efforts. This platform supports dialogue on cyber resilience, secure collaboration, and inter-agency cooperation, reinforcing a shared digital ecosystem within the UN (UNICC, n.d.-d).

7.3 Challenges

Despite having more than 100 partner organizations, available evidence suggests that a significant number of UN agencies do not fully access or actively utilize the services offered by UNICC. The reasons for this limited uptake are not clearly documented in publicly available sources, and no systematic assessment of barriers to adoption appears to exist. As a result, it remains difficult to determine whether this situation stems from lack of awareness, perceived misalignment with agency-specific needs, budgetary constraints, governance considerations, or preferences for maintaining in-house or alternative IT solutions.

The absence of explicit documentation on implementation challenges points to a broader issue of limited visibility into agency decision-making regarding shared IT services. This may also reflect the decentralized nature of the UN system, where agencies retain a high degree of autonomy over their digital strategies and investments. In such a context, shared services like UNICC may face challenges in achieving system-wide adoption, even when technically robust and strategically aligned.

To better understand this gap, further qualitative research would be needed, including interviews with agencies that have chosen not to engage with UNICC or that make only partial use of its services. Such inquiry could help clarify perceived constraints, identify unmet needs, and assess whether existing service offerings, governance arrangements, or funding models sufficiently address agency requirements. Without this insight, the full potential of UNICC as a system-wide enabler of digital interoperability may remain underutilized.

7.4 Learnings

UNICC serves as a hub for digital innovation across the UN system, actively advancing transformation in areas such as artificial intelligence, quantum technologies, cloud computing, and cybersecurity (UNICC, 2024b; 2024c; 2024d; 2025). Through these focus areas, UNICC supports partner organizations in adopting modern, secure, and scalable digital solutions that respond to evolving operational and policy needs. A strong emphasis is placed on collaboration across the UN system, as well as with international organizations, the private sector, and other relevant stakeholders, particularly in domains such as cybersecurity, where collective action and shared standards are critical.

A key learning from UNICC's approach is the deliberate alignment of innovation initiatives with the Sustainable Development Goals (SDGs). By linking digital transformation efforts to broader development and policy objectives, UNICC ensures that technological investments support system-wide priorities rather than isolated technical upgrades. This alignment helps partner organizations justify and integrate digital innovation within their strategic planning frameworks.

Another important best practice is the provision of neutral, shared digital infrastructure that can be used across multiple UN entities. By offering common platforms and services, UNICC reduces duplication, promotes interoperability, and enables agencies to benefit from economies of scale while retaining operational autonomy. This shared infrastructure model has proven particularly valuable in areas such as cloud services, enterprise platforms, and cybersecurity, where consistent standards and centralized expertise enhance both efficiency and resilience.

Finally, UNICC's governance arrangements reflect an inclusive approach that involves participating agencies in oversight and decision-making. Governance structures that represent partner organizations help build trust, ensure responsiveness to diverse needs, and foster collective ownership of shared digital services. This participatory model supports sustained collaboration and reinforces UNICC's role as a trusted service provider within the UN ecosystem.

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8. International Office of Migration (IOM) Common Pipeline

8.1 Overview

The International Office of Migration (IOM)'s Common Pipeline is a collaborative mechanism designed to support joint procurement and pre-positioning of humanitarian relief items, primarily Shelter and Non-Food Items (SNFIs) and Water, Sanitation, and Hygiene (WASH) supplies. Through this system, IOM procures relief items using either in-kind contributions or financial support from donors, transports them to strategically selected pre-positioning locations, and stores them until they are requested by partner organizations. While IOM retains responsibility for the items until formal handover, last-mile distribution is typically carried out by partner organizations themselves or, where relevant, with the support of the Logistics Cluster. All items distributed through the Common Pipeline are provided to partners at no cost, with arrangements coordinated with donors in advance (IOM, 2024). The first Common Pipeline was established in 2005 in Sudan and has since been implemented in 15 countries.

IOM generally considers establishing a Common Pipeline in contexts where it has a sustained operational presence and strong working relationships with key government counterparts. A well-developed national supply chain is also a prerequisite, as is broad acceptance of the pipeline approach by relevant clusters or sectors, donors, and other key humanitarian stakeholders. These conditions help ensure that the pipeline is operationally viable, well-coordinated, and aligned with the wider humanitarian response architecture (IOM, 2024).

Joint procurement and stock management under the Common Pipeline are facilitated through the Common Pipeline Request Tracking System (CPRTS), an online tool developed and maintained by IOM (IOM, 2024). Access to the system is generally limited to approved partners within the relevant Shelter or WASH Clusters. . A partner's operational capacity and physical presence in the country where the pipeline is implemented are important criteria in the approval process. Once approved, partners can use the system to view available stock and submit requests for specific relief items (IOM MENA, 2024).

The CPRTS supports a standardized workflow for managing partner requests. Partner organizations first submit requests for specific quantities of relief items based on real-time stock availability displayed in the system. These requests are then reviewed and approved by IOM, taking into account available inventory and competing demands from multiple partners. Once approved, the requested items are prepared for pickup from the designated pre-positioning locations, with coordination support from the Logistics Cluster where applicable. After collection, partner organizations are responsible for distributing the items to beneficiaries and subsequently reporting on the distribution through the system. Finally, partners complete a reporting step to document the overall process, ensuring accountability, traceability, and transparency throughout the pipeline cycle (IOM, 2024).

8.2 Benefits

The implementation of IOM's Common Pipeline offers several important advantages for humanitarian operations, particularly in large-scale and complex emergency contexts. One of the most significant benefits is increased efficiency. By relying on bulk procurement and centralized logistics arrangements, the Common Pipeline reduces overall procurement and transportation costs while accelerating response times. This approach allows humanitarian actors to access critical relief items more quickly than through fragmented, agency-specific supply chains (IOM, 2024).

Another key benefit is standardization. The use of uniform relief items across partners ensures consistent quality and technical specifications, which facilitates distribution, simplifies logistics planning, and improves coherence across humanitarian responses. Standardized items also reduce the need for parallel procurement processes and help avoid mismatches between supplies delivered by different organizations (IOM, 2024).

The Common Pipeline further enhances collaboration among humanitarian partners. By providing a shared mechanism for procurement, pre-positioning, and stock allocation, it encourages coordinated planning and reduces duplication of efforts across agencies. Partners can rely on a common pool of resources rather than competing for limited supply chain capacity, which strengthens collective action and improves overall system performance (IOM, 2024).

Transparency is another major advantage of the Common Pipeline. The CPRTS provides real-time visibility into stock levels, requests, approvals, and distributions. This level of transparency supports operational coordination and is particularly valuable for donor reporting and accountability, as it enables systematic tracking of how relief items are allocated and delivered (IOM, 2024).

The effectiveness of the Common Pipeline model was demonstrated in 2015 in the Nepal earthquake, where rapid and coordinated distribution of relief items was essential to the response (IOM Nepal, 2015). Over the years, the model has been adopted in a wide range of contexts, including Bangladesh, Somalia, Haiti, Mozambique, Nigeria, Pakistan, South Sudan, Ethiopia, Greece, Sudan, Syria, Ukraine, and Yemen, highlighting its relevance across diverse humanitarian settings (IOM South Sudan, 2021; IOM Somalia, 2024; IOM, 2024;).

8.3 Challenges

Despite the operational benefits associated with the Common Pipeline, several challenges can constrain its implementation and effectiveness. One key challenge is the resource-intensive nature of establishing and maintaining such a system. The Common Pipeline requires significant upfront and ongoing investments in staffing, training, and financial resources. Dedicated personnel are needed to manage procurement, inventory, partner coordination, and reporting processes, which may be difficult to sustain in contexts with limited operational capacity.

Another major challenge relates to coordination complexity. Effective operation of the Common Pipeline depends on close alignment among a wide range of stakeholders, including government authorities, donors, cluster or sector lead agencies, and implementing partners. Balancing differing priorities, approval processes, and expectations can be demanding, particularly in large-scale emergencies or politically sensitive environments. Achieving and maintaining consensus among these actors requires sustained engagement and strong coordination mechanisms.

Technology-related barriers also pose challenges, especially in fragile or remote contexts. Limited internet connectivity, inadequate digital infrastructure, or insufficient technical expertise at the field level can hinder the effective use of the CPRTS. These constraints may reduce real-time visibility, slow down request processing, and limit the system's ability to fully support transparent and efficient coordination across partners.

8.4 Learnings

The Common Pipeline can be considered a supply chain interoperability initiative, as it enables other humanitarian organizations to leverage IOM's established procurement, pre-positioning, and logistics capacities without the creation of a separate external entity. Instead, interoperability is achieved by opening access to IOM's internal supply chain infrastructure, processes, and stock through a structured and transparent coordination mechanism (IOM, 2024).

One key learning from the Common Pipeline is that interoperability can be effectively implemented through a lead-agency model when one organization has a strong operational presence, trusted relationships with government authorities, and well-developed supply chain capabilities in a given context. By assuming responsibility for procurement, storage, and stock management, IOM reduces duplication of efforts across partners while allowing them to focus on last-mile distribution and program implementation (IOM, 2024). This division of roles illustrates how clear responsibility allocation can enhance efficiency and accountability within collaborative supply chain arrangements.

The Common Pipeline also demonstrates the importance of standardized processes and digital tools in enabling collaboration at scale. The CPRTS provides a structured workflow for requesting, approving, tracking, and reporting on shared relief items, which enhances transparency and supports donor reporting requirements (IOM, 2024; IOM MENA, 2024). This highlights how shared information systems can act as critical enablers of interoperability, particularly when access is governed through clear eligibility criteria and cluster-based coordination.

Another important learning is the role of prior stakeholder alignment in determining the success of such initiatives. IOM's criteria for establishing a Common Pipeline, such as acceptance by the Logistics Cluster, donors, and government counterparts, underline that interoperability initiatives require broad buy-in to function effectively (IOM, 2024). Early engagement with these stakeholders helps mitigate coordination challenges and strengthens legitimacy.

Finally, the Common Pipeline illustrates both the potential and the limits of centralized supply chain models. While it delivers efficiency, standardization, and transparency benefits, it is resource-intensive and context-dependent, suggesting that such models are most viable in countries where operational scale, duration of engagement, and partner demand justify the required investment (IOM, 2024). As such, the Common Pipeline offers valuable lessons for designing future interoperability initiatives that balance efficiency gains with feasibility and sustainability considerations.

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9. Interchangeable Vendor List

9.1 Overview

One of the major outcomes of the United Nations Global Marketplace (UNGM) has been the establishment of a single, centralized supplier registration point that provides vendors worldwide with access to procurement opportunities across nearly all UN agencies. Through this shared registration portal, agencies both contribute to and draw from the same supplier database, ensuring that vendor information is consistently visible across the UN system. As a result, suppliers can be considered by multiple agencies without the need to repeatedly re-enter or resubmit their registration details.

Building on this centralized registration, UNGM explicitly enables UN agencies to share and piggyback on one another's contracts and Long-Term Agreements (LTAs) (UNGM, 2026). Piggybacking is an established form of inter-agency collaboration in procurement and is anchored in existing UN financial regulations and rules. It allows one agency to rely on another agency's existing contract or LTA instead of conducting a full, independent procurement process. This functionality is also referred to as the Interchangeable Vendor List. Under this concept, a contract or LTA established by one agency can be used by others as a reference point for their own procurement, reducing duplication of processes and accelerating access to goods and services. UNGM facilitates this exchange by ensuring that vendor and contract information is visible and accessible across participating organizations.

The Interchangeable Vendor List is not limited to procurement conducted through UNGM. Rather, it is a broader procurement cooperation mechanism grounded in the UN system's Mutual Recognition framework. By reducing the need for additional procurement reviews, it lowers administrative burdens and enables more efficient and timely procurement collaboration across the UN system (UN System Chief Executives Board for Coordination, 2023).

9.2 Benefits

The Interchangeable Vendor List and piggybacking mechanisms offer benefits that are closely aligned with those provided by the UNGM. By enabling agencies to rely on a shared pool of vetted suppliers and existing contracts, these mechanisms contribute to greater transparency and competition across the UN procurement system. The use of a single, interchangeable set of vendor information reduces fragmentation and ensures that procurement decisions are based on consistent and comparable supplier data.

A key operational advantage is the reduction in vendor onboarding time. Suppliers that have already been registered, vetted, and awarded contracts by one UN agency can be mobilized more quickly by others, without the need for repetitive due diligence or administrative procedures. This significantly accelerates procurement timelines, particularly in emergency contexts, where speed is critical.

Piggybacking on existing LTAs further enables rapid mobilization by allowing agencies to leverage contracts that have already been competitively tendered and negotiated. This not only shortens procurement lead times but also reduces transaction costs associated with running parallel procurement processes for similar goods and services.

Beyond these immediate efficiency gains, the Interchangeable Vendor List also creates opportunities for deeper inter-agency coordination. By aligning procurement planning and systematically leveraging shared LTAs, agencies could move toward bulk purchasing arrangements that increase volumes and strengthen their negotiating position with suppliers. Over time, this could support the development of so-called "super LTAs," jointly negotiated by multiple agencies, which could incorporate common requirements such as sustainability or environmental, social, and governance (ESG) clauses.

9.3 Challenges

Despite its advantages, the Interchangeable Vendor List and piggybacking mechanisms also present several challenges. One structural limitation is that vendors must first be registered on UNGM (UN Geneva, n.d.), which may unintentionally exclude smaller or local suppliers that lack the capacity or awareness to complete the registration process. As a result, the UN system may miss opportunities to engage a broader and more diverse supplier base, particularly in fragile or localized markets.

Another challenge relates to governance and power asymmetries between agencies. The agency that originally established an LTA retains ownership and control over that contract, and its approval is typically required for other

agencies to piggyback on it. This can slow down procurement processes if approvals are delayed or if the owner agency is reluctant to grant access, thereby limiting the intended efficiency gains of inter-agency collaboration.

There is also a risk of over-reliance on the pricing structures and contractual terms embedded in existing LTAs. While piggybacking accelerates procurement, it may reduce flexibility if market conditions change or if the original agreement does not fully reflect the needs or risk profiles of additional agencies. Over time, this could limit competition or lock agencies into suboptimal pricing or service conditions if contracts are not regularly reviewed or updated.

9.4 Learnings

The Interchangeable Vendor List demonstrates how a shared procurement infrastructure can strengthen inter-agency collaboration when it is consistently applied across the UN system. By relying on a common pool of vetted suppliers through UNGM, agencies can reduce duplication in vendor registration, due diligence, and contract setup, thereby lowering administrative burdens and accelerating procurement processes. When broadly adopted, this mechanism also enhances collective bargaining power, as agencies can leverage existing LTAs to negotiate better terms and conditions with suppliers.

More broadly, the Interchangeable Vendor List illustrates that interoperability in procurement does not necessarily require new institutional structures, but rather effective use of existing frameworks such as Mutual Recognition. Its success depends less on technical capability than on organizational willingness to share contracts, trust peer agencies' procurement decisions, and align internal procedures. As such, it highlights the importance of governance arrangements, incentives, and leadership in realizing the full benefits of shared procurement mechanisms.

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10. Quality, Social and Environmental (QSE) Working Group

10.1 Overview

The Quality, Social and Environmental (QSE) Working Group was established on 26 November 2010 at UNHCR's offices in Budapest as a collaborative initiative aimed at harmonizing procurement practices and improving product standards across humanitarian organizations (MSF et al., 2015). Initially created under the name "Quality Assurance and Product Development" group, the initiative subsequently expanded its scope to explicitly incorporate social and environmental considerations and was renamed the QSE Working Group to reflect this broader mandate (MSF et al., 2015).

The creation of QSE was triggered by a joint factory visit in China by UNHCR and the International Committee of the Red Cross (ICRC), during which both organizations discovered that they were independently procuring similar products from the same manufacturers (Fordham University, n.d.). This observation highlighted inefficiencies and risks associated with fragmented procurement approaches and underscored the need for greater coordination. The group was therefore formed around shared humanitarian objectives and common technical requirements, with the aim of improving quality management, ensuring social compliance, increasing environmental responsibility, and strengthening product development within humanitarian supply chains (USAID, 2020).

Today, the QSE Working Group is composed of six core organizations (ICRC et al., 2024):

- International Committee of the Red Cross (ICRC)
- International Federation of Red Cross and Red Crescent Societies (IFRC)
- International Organization for Migration (IOM)
- Médecins Sans Frontières (MSF)
- United Nations High Commissioner for Refugees (UNHCR)
- United Nations Children's Fund (UNICEF)

The primary objective of the QSE Working Group is to define harmonized product standards that can be used for joint procurement across participating organizations, while also mitigating negative social and environmental impacts associated with global humanitarian supply chains (MSF et al., 2015; USAID, 2020). Its thematic focus includes unified technical specifications, sustainability, local procurement, innovation, and quality control (MSF et al., 2015).

The group has operated on a voluntary basis for more than 14 years and has maintained a relatively low public profile. It received a short-term grant from USAID to support its activities and had planned to launch a dedicated website to disseminate its outputs, although this initiative was discontinued following the withdrawal of funding (personal communication). More recently, ESUPS has offered to host a dedicated QSE page on its website to facilitate broader sharing of technical specifications and documentation with the humanitarian community (personal communication).

QSE convenes biannual meetings and regularly invites additional stakeholders, including USAID-BHA, WFP, CARE, Catholic Relief Services, and Oxfam, to participate in its discussions (MSF et al., 2015). These meetings focus on reviewing and refining technical specifications for relief items, with the objective of improving product quality while reducing adverse social and environmental impacts linked to the procurement of non-food humanitarian items (MSF et al., 2015).

10.2 Benefits

The QSE Working Group enhances supply chain efficiency by harmonizing technical specifications for humanitarian relief items across its member agencies (USAID, 2020). These shared technical specifications provide a common reference that ensures products are procured, quality-controlled, and delivered in line with agreed requirements, thereby improving reliability and timeliness in support of affected populations (ICRC et al., 2024). By establishing a unified framework, QSE facilitates procurement coordination, strengthens collective purchasing power, reduces unit costs, and promotes consistent product quality across humanitarian operations (ICRC et al., 2024).

Beyond efficiency gains, QSE plays a central role in formalizing quality, social, and environmental considerations within humanitarian supply chains (ICRC et al., 2024). Harmonization efforts extend beyond purely technical parameters to integrate responsible sourcing and lifecycle thinking. For example, work on durable plastic tarpaulins has led to reductions in plastic use while maintaining required levels of strength and durability, demonstrating how standardization can support both operational and environmental objectives (ICRC et al., 2024).

Environmental sustainability is a core focus of the group's activities (USAID, 2020). QSE contributes to greener supply chains by promoting eco-designed products such as tarpaulins with reduced material use, recycled blankets, and geodesic tents, alongside joint sustainability strategies across member organizations (ICRC et al., 2024). One notable innovation is the transition from the Oxfam Bucket to the Jerry Bucket, a more durable and user-friendly water container designed to reduce water waste and improve efficiency in the field (ICRC et al., 2024). Similarly, long-lasting insecticidal nets have been improved through joint research and development efforts and more sustainable manufacturing processes (ICRC et al., 2024).

In recent years, sustainability and social criteria have gained increasing prominence within humanitarian procurement. Organizations such as UNHCR, UNICEF, and MSF have expanded the use of recycled materials in relief items to reduce their environmental footprint (ICRC et al., 2024). QSE provides a structured platform for agencies to share these innovations, align approaches, and strengthen collective impact through coordinated action (ICRC et al., 2024).

The group also benefits from the diverse expertise of its members, allowing best practices to diffuse across organizations (ICRC et al., 2024). For instance, USAID-BHA's climate resilience strategy, focused on greening procurement, supporting sustainable programs, and adjusting supplier expectations, has informed broader inter-agency practices within QSE (ICRC et al., 2024). UNHCR similarly emphasizes inter-agency collaboration through QSE and actively shares sustainability-related initiatives and lessons learned (UNHCR, 2024). Through this collaborative framework, QSE also advances quality assurance by promoting harmonized inspection protocols and common supplier standards, further strengthening accountability and performance across humanitarian supply chains (ICRC et al., 2024).

10.3 Challenges

Despite its accomplishments, the QSE Working Group faces several significant challenges. One difficulty lies in harmonizing technical standards across organizations operating under diverse procurement strategies and institutional mandates. These structural differences create interconnected challenges that affect efficiency, sustainability, and overall effectiveness, and make alignment across agencies complex and time-consuming (ICRC et al., 2024). In addition, limited awareness of QSE's mandate, activities, and value among some agencies and individual staff members constrains participation and reduces collective ownership of the initiative (USAID, 2020).

Efforts to promote local procurement have produced mixed results. While local sourcing has the potential to reduce transportation-related emissions and support local economies, it is often constrained by weak oversight mechanisms, uneven manufacturing standards, and limited supplier capacity (ICRC et al., 2024). For example, a USAID-BHA case study in Indonesia identified inadequate plastic waste segregation as a major barrier to producing high-quality recycled plastic sheeting, illustrating how environmental and quality objectives can be undermined by local infrastructure and capacity gaps (ICRC et al., 2024).

Ensuring consistent quality through inspection processes remains another challenge (ICRC et al., 2024). Significant variation exists among inspection providers in terms of accreditation, technical competence, geographical coverage, and the use of subcontractors (ICRC et al., 2024). Even well-established inspection firms may apply inconsistent standards across different locations, underscoring the importance of robust oversight in selecting and managing inspection services (ICRC et al., 2024). While there is clear potential to share audit and inspection results across agencies to reduce duplication and strengthen quality assurance, doing so would require greater transparency and more systematic communication between organizations (ICRC et al., 2024).

Balancing innovation with the immediate operational needs of humanitarian response also presents difficulties (ICRC et al., 2024). Agencies must ensure that efforts to introduce more sustainable or innovative products do not compromise the quality, reliability, or timeliness of life-saving assistance during crises (ICRC et al., 2024).

Finally, the group faces challenges related to funding continuity. Although USAID recognized the strategic importance of QSE and provided short-term funding support (USAID, 2020), the subsequent loss of this funding has constrained the initiative's ability to sustain activities and implement planned improvements, such as the development of a dedicated central website to share specifications and documentation more widely (personal communication).

10.4 Learnings

QSE offers several transferable lessons for the design and governance of shared services in humanitarian supply chains. It demonstrates that “coopetition”, collaboration among organizations that may otherwise compete for funding or visibility, is both feasible and effective when actors are aligned around shared humanitarian objectives and common technical standards (Fordham University, n.d.).

A key strength of QSE lies in its broad and inclusive approach to collaboration. The group actively engages with a diverse set of stakeholders, including academic institutions, private-sector manufacturers, and humanitarian organizations (ICRC et al., 2024). This ecosystem approach has enabled project-based learning, structured supplier engagement, and research-driven product development that responds directly to operational needs in the field (ICRC et al., 2024).

The harmonization of standard operating procedures for product specifications and inspections has proven particularly valuable. Common technical standards improve efficiency by reducing duplication across agencies, while also strengthening accountability and quality assurance throughout the supply chain (ICRC et al., 2024). Engagement with suppliers, universities, and other partners further supports innovation and helps address systemic challenges related to quality, sustainability, and production practices (ICRC et al., 2024). Mechanisms such as project-based learning, coaching between buyers and suppliers, and structured feedback loops with affected populations have emerged as critical components of this collaborative model (ICRC et al., 2024).

Overall, QSE illustrates that improving humanitarian procurement outcomes requires sustained collaboration, continuous innovation, and a balanced approach that integrates cost-effectiveness, quality, and environmental considerations (ICRC et al., 2024). The strong participation in the QSE conference held in 2024 and the high demand for future events indicate that the platform remains relevant, trusted, and valued by its stakeholders, reinforcing its potential as a long-term driver of harmonization and sustainability in humanitarian supply chains (ICRC et al., 2024).

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