Ukraine

GAPS AND NEEDS ANALYSIS (GNA)
Assessment and recommendations report

June 2022
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**Executive Summary**

The work of the Logistics Cluster in support of the Ukraine emergency thus far has focused on providing information to partners that supported the rapid set-up and initial operation of their supply chains. It also helped to bridge gaps caused by major changes in commercial supply chain structure, as described in in *Section 1: Background Information*, and the lack of immediate organisational capacity to deal with these, through the provision of storage and transport services outside and within Ukraine.

Some five months into providing this support, a representative group of cluster partners has been interviewed to understand their operating challenges going forward. This information has been triangulated with data on usage of current cluster services and how the operating environment is likely to develop, to assess how cluster support and activities should be adjusted for the future. This approach is further explained in *Section 2: Task and Methodology*.

The description of how organisations currently operate in *Section 3: Preliminary Findings*, provides evidence that the cluster service portfolio has largely met its objective. That said, the recent drop off in use of current cluster services is a clear indicator that the support required to meet the future challenges identified by organisations for streamlining these supply chains will be different going forward. The general availability of transport and storage resources in most locations, and the lack of local market capacity knowledge on how to access these underlines this point.

Analysis of the challenges in *Section 4: Findings Analysis* shows that the impact on agency supply chains for the majority of the identified challenges is directly related to how the supply chain is configured. In general, and assuming there is market capacity, sourcing supplies and equipment as close to the end user as possible and shortening direct management of the supply chain will provide the greatest mitigation of challenges, as well as providing the most support to the general economy, and reducing pressure on the challenges for longer supply chains that require international sourcing.

The recommendations then for future cluster services, provided in *Section 5. Conclusion and Recommendations*, is to pivot the portfolio of support, so the primary emphasis is on providing partners with information products that are important for supply chain configuration, planning, and effective and efficient operation. At the same time, whilst the offer of common services is clearly redundant in some locations, it will be important to maintain and possibly step up these in others, specifically for supporting access to hard-to-reach areas which continues to be a gap.
1. Background Information

1.1 The Humanitarian Context

Current Situation

The launch of a Russian Federation military offensive into Ukraine on 24 February 2022 saw the start of a rapid decrease in the stability of Ukraine’s security situation. The subsequent and ongoing armed violence, has resulted in loss of life, injuries and mass displacement of the population, both within Ukraine and into neighbouring countries. In addition, there has been significant degradation of the civilian infrastructure, which has put the country’s capacity to maintain life sustaining and basic services for affected communities under severe pressure.

Against a current backdrop of continued and intense fighting in the south and east of the country, and sporadic attacks elsewhere, it is estimated that at least 15.7 million people living in Ukraine will require some form of extraordinary assistance in 2022, 7.7 million of whom are internally displaced (IDP).

Alongside protection from the conflict itself, the most pressing needs of this group are multi-sectoral in line with the limited access to safe housing, food and utilities, as well as health and social security services and products. The Government of Ukraine (GoU) is working to provide this assistance in an environment where multiple strategic issues compete for its attention and resources.

Humanitarian Response

Within Ukraine a response framework of both established organisations and first-time relief providers has emerged to help address the needs of the affected population;

 - At the national level the GoU is attempting to centralise coordination of aid.
 - At the oblast and local levels the GoU, Oblast Military Administrations (OMAs), and Hromadas (municipalities), alongside national and local NGOs, distribute aid to affected populations.
 - At local level civil society organisations (CSOs), faith-based networks, and a considerable amount of newly emerged volunteers / volunteer networks are providing vital humanitarian services.

International humanitarian response has scaled up considerably since February 2022. The current coordinated response plan, comprising the intervention activities of around 130 agencies, focuses on supporting GoU efforts by targeting assistance to almost 9 million of the affected population. The strategy is to deliver in the hardest-to-reach areas, provide assistance as close as possible to people in need, and respond to displacement and vulnerability in all areas of the country.

International humanitarian agencies operate within the strong national response framework, juggling support to government entities, programmes with established implementing partners, and establishing new relationships with more fluid ad hoc networks. Interventions centre on the delivery of timely life-saving multi-sectoral assistance, protection in line with humanitarian law norms and standards, and support for the provision of basic services. The main delivery modality is planned to be multi-purpose cash (MPC) where markets are functioning. This is augmented by provision of services, goods and equipment in the education, food and nutrition, shelter, WASH and protection sectors, both at the outset of the crisis and where availability of goods and services continues to be low.

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2. UNOCHA Flash Appeal - Ukraine, HPC April revision March to August 2022, p.2
3. UNOCHA Flash Appeal - Ukraine, HPC March to May 2022, p.9
4. Ukraine - Bridging Humanitarian Response, ACAPS, 25th May 2022, p.4
5. UNOCHA Flash Appeal - Ukraine, HPC March to May 2022, p.10, 12
1.2 The Supply Chain Operating Context

Economic Context

Ukraine is an emerging free market economy with a nominal population of around 42 million people. Its current GDP is estimated at around $65 billion (84th in the world). The main contributing sectors to its economy are services (60%), industry (30%) and agriculture (12%). The $70 billion of exports in 2021 was largely made up of ferrous and non-ferrous metals, petroleum products, machinery and transport equipment and food products. Imports in a similar period were worth $54 billion; mainly natural gas, petroleum products and machinery. In terms of business environment, the country has a ranking of 85/190 countries for ease of doing business ("easy"), 82/133 countries for global competitiveness, 122/180 for corruption perception.

The effect of the ongoing crisis on the country’s economy, particularly on exports from the industrial and agricultural sectors, is likely to be significant. At the time of writing, it is estimated that 35% of the economy is not working at all, 60% of all enterprises are operating at reduced levels and 17% of businesses have ceased trading completely, including closure of some 200 manufacturing plants. The World Bank currently forecasts the economy will contract by a total of 45% by the end of 2022, with the impact on energy, industry and food sectors being felt both nationally and the globally.

Supply Chain Flows and Resources

As well as a network of road, rail and river links to Romania, Moldova, Slovakia, Hungary, Poland and Russia, Ukraine has some 13 high-capacity seaports and 20 international airports to facilitate the import and export of goods and equipment. The current conflict has curtailed the use of these ports, airports and land borders to Russia, which previously handled between 70% and 80% of imports and exports. Anecdotally, customs officers report a minimum of a doubling of previously seen volumes of road freight transport, not to mention people, across the borders that remain open - particularly those with Romania and Poland which have the highest capacity. Efforts are underway to ease the pressure on these routes with the increasing use of rail and river transport particularly for larger volumes, but the viability of these for most actors is currently subject to operational and security complications.

The traffic increase is likely the result of normalising adjusted trade routes, with ports and airports as well as manufacturers based in Europe facilitating increasing flows of commercial and humanitarian goods and equipment. These routes are also required to handle the delivery of all petroleum, diesel and other fuels to meet Ukraine’s needs, which currently have to be imported, as well as the movement of significant volumes of government-to-government equipment. Infrastructure at crossings is being further stressed by increasing volumes of exports, including the movement of at least part of 22 million mt of grain, recently initiated. Despite the implementation of simplified procedures by the various authorities, substantial delays for trucks moving into and out of Ukraine are a regular occurrence.
Whether consolidating goods and equipment at warehouses in surrounding countries for onward transport or using a swap body/container/trailer arrangements before entering the country for direct delivery, the overwhelming majority of road freight transport border crossing into Ukraine is carried out using Ukrainian trucks operated by Ukrainian drivers. Most enterprises plan their cargo to be received at regional hubs within Ukraine, where value adding activities such as assembly or kitting are carried out before onward distribution. Despite the destruction of some strategic bridges and sections of highways the extensive internal road network, which can be somewhat variable in quality and subject to freezing in winter, remains largely intact for the time being.

1.3 The Logistics Cluster Response

Initiation of Cluster Services

At the outset of the response, the Logistics Cluster identified a need to support utilisation of cross-border corridors by agencies moving relief items into Ukraine, specifically routed through Poland. This followed a rapid assessment and was on the basis that the regular supply of basic commodities was severely disrupted and so alternate avenues were required to assist the affected population.\(^\text{19}\)

Initially this support took the form of common storage services made available to cluster partners including International Cooperation Agencies (ICAs) in Warsaw, Lublin and Rzeszow in Poland and Lviv in Ukraine, as well as transportation of goods and equipment between hubs and to onward distribution points.\(^\text{20}\) In addition to operating these services, the cluster team worked on identifying and advocating for simplified border crossing and customs procedures, which were then communicated to partners via the cluster website. Sector-wide coordination meetings that facilitated exchange of information for planning and operational improvement were also convened at an early stage.\(^\text{21}\)

Current Cluster Activities\(^\text{22}\)

Today, the cluster continues to support the effective and efficient operation of partner supply chains, primarily through the systematic exchange of information between members. Bi-weekly virtual national coordination meetings, and in-person meetings in Dnipro for more locally focused activities, are supplemented by regular information updates published on the website and disseminated via the mailing list, enabling ad-hoc connections between agencies to address specific issues.

Based on partner requests, and as their operations have gathered pace, the Logistics Cluster has expanded its service to offer storage and transportation for relief goods and equipment in Chernihivska, Dnipropetrovska, Kirovohradksa, Kyiska, Lvivska, Odeska, Vinnytska and Zakarpatska Oblasts within Ukraine. The same services are offered for cross-border support in Podkarpackie (Rzeszow) and Lubelskie (Lublin) Provinces in Poland, however the services in Warsaw were surplus to requirements and so is no longer operational.

A coordination cell based in Lviv oversees the cluster activities and in-country service delivery. Satellite cells are active in Dnipro and Rzeszow, largely to support the operation of inter-agency convoys and manage upstream service delivery, respectively. A Medical Logistics Working Group was established to address supply chain issues distinct to the health sector, and an Operational Advisory Group (OAG) was formed to provide the cluster management with members’ strategic feedback.

\(^\text{19}\) Ukraine Logistics Cluster Sitrep 4th March 2022
\(^\text{20}\) Ukraine Logistics Cluster Sitrep 2nd March 2022
\(^\text{21}\) Ukraine Logistics Cluster Coordination Meeting Minutes 29th February 2022
\(^\text{22}\) Concept of Operations Map, 13th June 2022 provided in Appendix 1
\(^\text{23}\) Ukraine Logistics Cluster OAG TOR, 8th April 2022
2. Task and Methodology

2.1 Definition of the Gaps and Needs Analysis (GNA) Exercise

A Gaps and Needs Analysis is a consultation of partners conducted by the Logistics Cluster to examine common logistics gaps for the delivery of humanitarian aid in a given country or context. In this case two of the five possible objectives noted in guidance for carrying out a GNA are applicable and form the objective and scope of the study. These are:

- Assess/review existing and potential in-country logistics gaps based on partner feedback through participatory consultations on both global and country-level.
- [Provide information to] facilitate the development and adaptation of the Logistics Cluster’s/Sector’s strategy to meet evolving gaps and needs in countries with active operations.

2.2 Methodology

The approach used to develop the GNA and meet the objectives comprises four main components, as summarised in the figure opposite. Data has been collected from three sources to form the key inputs; (i) interviews with agencies broadly representing cluster member types, geographical and sectoral focus and logistical capacity, (ii) the clusters information management systems (RITA, spreadsheets, records) reporting service uptake by users, and (iii) relevant reports and documents as well as views and insights from logistics service operators.

Inductive reasoning has been applied to each of the collected data sets to produce three main findings; (i) a qualitative description of how humanitarian agency supply chains are operating and developing, incorporating current and future challenges, (ii) a quantitative description of the role that cluster services currently play in the operation of these humanitarian supply chains and (iii) key external aspects of the current and future operating environment in which humanitarian supply chains will operate.

The third component of the methodology assesses the challenges identified in the findings to specify current and future gaps and validate these. The importance of supply chain configuration in mitigating these gaps is discussed, and then the most likely solutions identified through triangulation of the findings. Following on, the role of the cluster in implementing the solutions is specified.

Conclusions drawn from the analysis, recommendations on how the cluster’s service portfolio should be adjusted for the future, and considerations for changing from the current to future state, together form the outputs of the GNA – final component of the methodology.

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24 Logistics Cluster GNA - Accessed 13th June 2022
25 An analysis of the interview sample, by type, level of interlocuter and areas and sectors of operation, is provided in Appendix 2. There is no interview list as agencies were guaranteed anonymity, and the sample group is discrete and not supported by a survey.
2.3 Information Reliability

As with any research type there are several aspects of the information that need to be kept in mind when considering the findings and analysis. The most important in this exercise are:

*Timing of the study.* As cluster partner programmes and supply chain set-ups transition from evolution to steady state, the timing of the GNA is appropriate. That said carrying out a study at such an early stage in an emergency with a limited planning horizon has the inherent risk of redundancy. A flexible approach to utilising the outputs in line with any changes in operational variables will be key.

*Methodology application.* The standard GNA scope and methodology is comprehensive. It has been contextualised in this case by reducing the scope and forgoing some data collection elements, in respect of the maturity of the response, the stability of the situation, and the availability and quality of information – so ensuring that outputs produced are as reliable and accurate as possible.

*Data quality and availability.* Cluster partner inputs have been collected through a relatively large number of in-depth partner interviews (22) to ensure reliability of data, and reasonable representation of the main groups.26 The inductive approach to consolidation of this data means that whilst the main characteristics and views of each group are well represented, when applied to individual agencies some of the findings may be less applicable, or more exclusive inputs may not be included.

*Market Profile.* Information on how markets operate and the logistics infrastructure and assets capacity is fragmented and largely out of date. The latest Logistics Capacity Assessment (LCA) by WFP was in 201727 for example, and a current Market Capacity Assessment (MCA) has not been carried out by any agency to date. In this regard, the GNA is informed by partner feedback and limited discussions with operators, which likely covers the main aspects but is in no way all-inclusive.

3. Preliminary Findings

3.1 Humanitarian Agencies Supply Chain Operations and Challenges

*Current Agency Supply Chain Operations*

In general, the supply chains of responding humanitarian agencies are currently structured and managed using a similar approach. Basic needs relief items and equipment, and increasingly rehabilitation materials sourced from suppliers, stockpiles, framework agreements or donations are pushed through the supply chain. The vast majority is transported by road either directly, or via consolidation centres in Europe, to warehouse hubs in Ukraine. The items are then made available to implementing partners for distribution to the affected population, using secondary storage and transport assets.

Based on their modality of operating within the described structure, humanitarian agencies can be viewed into two distinct groups: the UN/International Cooperation Agencies (ICA), and INGOs/NNGOs and Red Cross/Red Crescent (RCRC) societies. The main differences between the groups can be seen in how supply routes are utilised for the delivery of assistance, and the method of engaging and employing the necessary logistics infrastructure and assets.

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26 This is particularly important as a cluster as tests showed the engagement and veracity of data acquired from such a cluster wide survey was likely to be low, and so this data collection tool was not used.

27 WFP - Ukraine Logistics Capacity Assessment - 2017 accessed 16th June 2022
INGO/NNGO/RCRC Societies. Predominantly these organisations work with local NGOs, CSOs, and volunteer networks, although some interaction with government agencies is also reported. Initially mostly managing donations of relief items, they are largely transitioning to regional and national sourcing for supplies. Similarly for logistics needs, use of the cluster common services to fill resource gaps at the outset of the response has generally been replaced by 3rd party logistics (3PL) contracts for warehousing at both European and Ukraine hubs, and cross border transport. Secondary warehousing and transport are operated in conjunction with implementing partners, either using service providers or managing stores and vehicles directly.

UN/ICA. Whilst these agencies also work with INGOs/NNGOs as implementing partners, assistance is more likely to be channeled through local government and civil protection structures. Relief items and equipment have largely been provided from stockpiles and global frameworks to source relief items and equipment. With the notable exception of food assistance, which is delivered direct to UN agency managed warehouse hubs and distribution networks in Ukraine, there has been heavy reliance on the Logistics Cluster to receive goods at the Polish border and provide storage and transport both into and within Ukraine. As the operation has developed, so parts of this supply chain have been contracted by agencies to commercial service providers, largely where cluster service levels were seen as inadequate, or across borders and in areas where the cluster doesn’t offer services.

Future Agency Supply Chain Plans

A common theme across agency strategies is to increase the use of MPC as the main delivery mechanism for assistance in affected areas wherever possible and only procure supplies and equipment where these are not available locally in a competitive market. Although the mix will depend on specific contexts and needs, in general MPC is a more viable option in the west and north of the country, and a higher volume of physical goods is more likely required in the east and south.

Agencies note that for areas where accessibility is the issue, they will procure supplies and equipment locally where possible and if the market will not be adversely affected, otherwise these will be imported. Agencies are expecting the main imports to be significant volumes of materials for reconstruction and winterisation in the coming months due to extensive damage to housing infrastructure, and the reduced capacity of national manufacturing facilities, although the latter has not been verified28.

Again, there are a number of similarities across agencies in terms of future supply chain plans to support organisation strategies. Continued streamlining of international supply routes and national hubs, along with further development of local infrastructure and capacity to support last mile delivery in hard-to-reach areas were cited as the main focus by most agencies interviewed. With the exception of food assistance, most UN/ICA mentioned they still expect to be using cluster services in the medium-term; either as a main component of their own supply chain or to provide flexibility for any supply and demand issues. The vast majority of the INGOs/NNGOs/RCRC group, on the other hand, expect to be operating with a mix of 3PL contractors alongside assets and infrastructure provided and managed by cooperating partners or directly by their own logisticians.

28 Shelter Cluster Presentation - Slides 13 - 21, Dnipro Coordination Meeting, 15th June 2022
Current and Future Challenges

Interviewees were asked to identify the main challenges to operating efficient and effective supply chains in the short-term, and those they see persisting or emerging in the medium-term. These are noted in the table opposite, ranked by the number of respondents reporting the challenge. Whilst this table shows consolidated responses, there are distinct patterns in the data in line with the grouping mentioned previously. Problems sourcing fuel, the availability of professional logisticians and congestion at the border are the most pressing concerns for most agencies in INGO/NNGO/RCRC group, and whilst mentioned by the UN/ICA group were not ranked in their top 2. The immediate concerns of this group are reported as their ability to plan transport as required, and access to hard-to-reach areas, which the INGO/NNGO/RCRC group also mentioned but as less of an issue.

Both groups agree that, whilst they foresee a number of these issues will be short-term and either be resolved, normalised or become irrelevant, the top continuing or emerging challenges will be around understanding and developing local market capacity, maintaining access to hard-to-reach areas, and managing supply to meet demand in line with the myriad of moving parts (programme plans, changing context, infrastructure constraints etc.). The other notable continuing issue for INGO/NNGO/RCRC group is seen in the availability of professional logisticians, which is seen to pose less of a challenge for the UN/ICA group.

3.2 Utilisation of Logistics Cluster Services

Information Management and Coordination

The Logistics Cluster has been providing core information management (IM) and coordination support since the outset of the response. In this time 176 agencies, 75% of which are INGO/NNGO/RCRC and 14% are UN/ICA, have been supported with data provided in 56 information products, as well as facilitating general coordination meetings and responding to specific requests for information.

The number of people interested in attending coordination meetings remains high, albeit in slight decline. The same trend is seen in the number of new members signing up for the cluster mailing list, and in the number of people accessing the cluster website on a regular basis.

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29 Challenges identified by each group, and an explanation of labels is provided in Appendix 3.
30 Defined by the Global Logistics Cluster as “Organisations attending coordination meetings, attending trainings, or using common services” JIP 20th June 2022
31 Additional graphs with a breakdown of agencies supported, products, mailing list users and website activity is provided in Appendix 4.
Common Services

In the period 25 February to 31 May 2022, 17% (31) of the supported agencies have used cluster common services – 2 ICAs, 21 INGOs, 1 NNGO, 1 RCRC and 6 UN agencies, as summarised below.

Storage. The cluster has received some 17,500 m³ of relief items at 8 warehouse locations. 63% of this has been for 2 ICA and 4 UN agencies, with 18 INGOs taking up a further 32%. The three most used locations are warehoused based in Dnipropetrovska (34%), Lvivska (25%) and Podkarpackie (17%). Three agencies in the UN/ICA group continue to store significant quantities of relief items with the cluster, causing spikes in service demand. Use by all other agencies has reduced to negligible levels, except for Dnipropetrovska, where storage and distribution is problematic.

Transport. The cluster team has dispatched around 13,000m³ of relief items in seven locations, 86% of which is attributable to Rzeszow (Podkarpackie region). 70% of the total transported was for UN agencies (77% of the Podkarpackie total) with 10 INGO’s accounting for a further 22%. With the exception of Podkarpackie, transport requests are currently less than, or the equivalent of one 40’ container per month. Transport volumes in Podkarpackie are also reducing, but subject to the demand spikes mentioned in the storage section, as the agencies responsible use both services.

Service Request Forms (SRFs). In this section it is useful to examine the volumes of storage and transport SRFs as a proxy for levels of cluster resource employed. 242 such requests were handled in the period studied, with the majority of the 70% raised by ICA/UN agencies being generated by 3 organisations. 25% of the requests were raised by INGOs. In line with the volumes of storage and transport, volumes of SRFs peaked in April and the start of May and have consistently dropped in nearly all locations since then – down to single figures over all locations by the end of May.

32 Detailed breakdown of common services by location is provided in Appendix 5.
3.3 Availability of Supplies and Resources

As noted previously, comprehensive information describing the supplies and equipment available on the local market, or storage and transport resources available to facilitate delivery to the affected population, is scarce. Notwithstanding this, the following sections provide a brief overview of the key aspects as they are currently understood.

Sourcing

Whilst difficult to say with certainty, it seems that the conflict is likely to become protracted and somewhat stuck for at least the coming months and possibly years. A recent ACAPS review of national and local humanitarian systems\(^3^3\) identified a number of key factors that could affect and shape the humanitarian response going forward. The most apposite of these for sourcing planners are:

- In kind donations from private business are reducing and will be replaced by GoU and humanitarian capacity.
- The capacity of local responders will likely affect assistance levels, particularly in local and conflict affected areas.
- Access to hard-to-reach areas will become increasingly complex as the conflict intensifies in some areas, and becomes a stalemate in others.

These factors combine to mean significant volumes of basic goods and equipment will continue to be required from the humanitarian community, on top of materials for discrete programmes such as rehabilitation and winterisation. It is unclear to what extent local markets will be strong enough to support the application of MCP and local procurement to meet these requirements. In addition, ensuring appropriate relief items and resources are readily available at short notice for delivery to the affected population will become critical to maximise the use of all access opportunities. Storage and transport facilities will therefore remain important.

Storage

Ukraine’s total warehouse market capacity before the conflict was estimated at 2.3 million m\(^2\) of A+ and B+ warehouse spaces. Most of this is located in Kyiv region (23.4%)\(^3^4\), followed by Cherkasy region (7.6%) and Kharkov (7%), with the rest mainly distributed among Odesa, Dnipro and Lviv. In general, the market is well diversified and sophisticated enough to offer warehousing to international standards with major global 3PLs\(^3^5\) and developed local 3PLs\(^3^6\) providing storage for various industries at competitive prices. Whilst there is good capacity, an estimated 400,000m\(^2\) has been destroyed since the beginning of the conflict, a significant proportion of which had high density concrete floors required for operating powered materials handling equipment.

Currently storage space becomes less available and more expensive from the east to the west of the country, as most companies have transferred their stocks in this direction and have not yet fully resumed commercial activities. There are exceptions such as Dnipro which, due to its central geographical location, developed infrastructure and equidistance from the conflict-affected areas, has become an advanced prepositioning hub for multiple humanitarian agencies and so space is more constrained.

\(^3^3\) Ukraine - Bridging Humanitarian Response, ACAPS, 25th May 2022, p.4
\(^3^4\) Pro-Consulting market survey 2019
\(^3^5\) Kuehne and Nagel, DHL, DSV Panalpina, Rhenus, Raben, etc.
\(^3^6\) Nova Poshta, FM Logistics, Berger Cargo, Zammiler, Pharmasoft, etc.
It is expected that as companies re-establish commercial activities, so the price and availability of storage will re-balance across the west and centre of the country if the areas remain stable. In Dnipro and areas closer to the conflict such as Odesa, large capacity warehousing facilities availability will decrease as these are contracted by the larger companies to restart commercial activities, or humanitarian agencies to be used as hubs into hard-to-reach areas. This constraint will be exacerbated by the limited personnel available to offer additional services such as kitting, picking and packing etc.

Transport

In recent years, the number of international players within the Ukraine road freight and logistics sector has enabled an open and highly competitive market without dominant players, both for national and international transport. This market changed dramatically when the conflict started, and while trucking capacity has largely been able to meet market needs, the price has more than doubled in the last four months, and continues to rise, both within Ukraine and for import and export for road freight transport\(^\text{37}\). Availability and service priority is given to organisations who can, and are prepared to, react to sudden price changes. The three main causes of this market change are:

- Exclusive use of Ukrainian trucks for cross border transport, and relocation of trucks nationally away from conflict zones nationally – reduced availability
- The switch to road transport for goods and equipment that would have been channelled through currently closed ports and airports – increased demand
- Fuel scarcity and redundant operating time from port and border congestion and limited opportunities for back loads – increased costs and reduced efficiency

It is estimated that local trucks for distribution (minivan, 5 mt and 10 mt trucks) continue to be available in sufficient quantities in the market, but availability is subject to local operating difficulties with drivers reluctant to travel towards conflict-affected areas\(^\text{38}\). There are indications that the availability of larger trucks (20 mt) used for long distance haulage within Ukraine is also improving as larger subcontractors progressively reallocate assets and staff as required. These have the same constraints for travel toward conflict-affected areas as the local trucking. Prices for both local and national transport are expected to remain high but stable, notwithstanding any deterioration in the general security and fuel availability situation.

Truck capacity for cross-border road freight transport is likely to come under pressure as the significant increases in movement of grain for export, and the import of reconstruction and winterisation materials have a knock-on effect on demand. Whilst there is increasing demand, there are also indications that previously reticent national and international hauliers are gradually willing to be contracted. There are also moves to open up rail and river corridors, and whilst this may alleviate a part of the burden, the price of this road freight transport will probably remain volatile for some time to come.

\(^{37}\) [https://www.della-ua.com/](https://www.della-ua.com/) (accessed 26\(^\text{th}\) June 2022) gives a view on price increases for inland and international road freight transport over the last year.

\(^{38}\) To help meet this challenge, last mile delivery services are offered free of charge to humanitarian actors by HI / Atlas Logistique in partnership with ECHO in some areas [https://www.hi.org/en/atlas-logistique](https://www.hi.org/en/atlas-logistique) accessed 26\(^\text{th}\) June 2022
4. Findings Analysis

4.1 Gaps Identification and Validation

The challenges identified by cluster partners have been analysed using the information in the findings to identify and validate the current or potential future gaps.

_Fuel scarcity._ In 2020 Ukraine imported about 70% of its petroleum products needs from Russia, Belarus and Germany, the other 30% being produced in its sole operating refinery\(^\text{39}\). The supply of petrol and diesel has been constrained since the start of the war, with existing supply halted and the production capacity at the refinery, as well as strategic reserves destroyed\(^\text{40}\). Fuel availability is a constraint nationally, and applies to humanitarians’ access to fuel for light vehicles, as well as for their transport contractors, particularly inside the country. Whilst supply has increased through western Europe over the past months, the situation will remain fragile, with any escalation in the conflict and the onset of winter likely to further impact availability.

_Availability of logistics professionals._ The international and national response to the conflict has been sizeable, and so the demand for experienced humanitarian logisticians who can operate in a mature market is significant. These profiles are not the most common in humanitarian agencies. Positions have been filled in the short-term by senior staff drawn from other operations and by outsourcing the management of activities by using contractors or the cluster. Nationally the pool of technical logisticians which was substantial, has been severely reduced by reassignments to the military.

_Border Congestion._ There is huge pressure on the land borders that remain open to facilitate the majority of Ukraine’s imports and exports. Largely these borders have dealt well with increased traffic, implementing measures to reduce administration, increase flow rates and allow prioritisation. There is finite capacity however, and waiting time is likely to remain a reality until significant volumes of goods are channelled through alternate corridors (reopened road borders, rail, river, etc).

_Transport planning._ Largely there is sufficient international and national trucking capacity currently available to meet humanitarian requirements, with some local exceptions usually around willingness to deliver in conflict affected areas (see also para 56). The often-stated ‘unavailability of trucks’ by humanitarian agencies, is usually caused by one of three factors, or all in combination; (i) the restriction of being able to pay what are spot market rates, using traditional contracting framework tools with long lead times, (ii) the inability to forecast demand and provide sufficient lead and transit times to arrange transport, and (iii) the lack of organisational capacity to source appropriate contractors.

_Accessing hard-to-reach-areas._ According to reported activity, levels of assistance being delivered into hard-to-reach areas is relatively low. There appears to be three facets to this challenge; (i) the process for coordinating with parties controlling access is unclear, (ii) it is relatively difficult to find transporters willing to deliver into these areas (see also para 55) and (iii) the most appropriate assistance is goods in kind which need to be stored near the hard-to-reach areas to allow flexible access in line with access agreements (see also para 60)\(^\text{41}\).

\(^{39}\) https://www.eia.gov/international/analysis/country/UKR
\(^{40}\) https://www.ukrinform.net/rubric-economy/3509685-destroyed-kremenchuk-refinery-cant-be-restored-this-year.html
\(^{41}\) “As US sends aid to Ukraine some say its not enough”, USA Today accessed 8th June 2022, UNOCHA Situation Report, 22nd June 2022
Aid worker transport. Linked to the level of logistics professionals available (see paragraph 53), there is a requirement for logisticians, as well as other technical staff, to move between locations within Ukraine. Dependent on the agency’s security protocols and vehicle allocation, there is limited capacity which could be much reduced if some sort of consolidated humanitarian shuttle was organised for travel in Ukraine.

Local Market Capacity. This is probably the single biggest influence on how supply chains are configured - depending on what can be sourced in country, and operated - depending on assets and infrastructure availability. Whilst initiatives are underway in various sectors (food for example) there is little in the way of comprehensive information on market capacities. There is a lack of up-to-date information on sourcing of products as well as infrastructure and assets, both current and potential, that could be used to inform supply plans development (see also para 59) and how they are implemented.

Supply Planning. The effectiveness of a supply plan to meet programme demands, and the level of efficiency that can be achieved is related directly to the lead time available. This needs to be increased as far as possible as it impacts on all aspects of the supply chain from sourcing, securing transport and storage resources at reasonable costs, to synchronising the flow of goods to best take advantage of available capacities, as well as mitigating any additional pressures on supply routes (see also para 54, 55 and 60).

Storage. As with transport there is largely sufficient international and national storage capacity currently, again with local exceptions usually around specific classes of warehouse in conflict-affected areas (see also para 56). The issue in this case, and the reason for using cluster services outside conflict-affected areas is a lack of knowledge of service providers and availability of agency personnel to assess and identify facilities over what is a wide geographical area.

4.2 The Importance of Supply Chain Configuration

The effect of the gaps on the ability of any humanitarian agency to operate its supply chain, is largely dependent on the supply configuration employed. Supply chain configuration ❶ in the diagram over the page, is the most susceptible to the future challenges; the configuration the current cluster common services are largely supporting. This is principally due to the multiple actors and hand-off points involved. In the first place, an understanding of the local market is required to ensure it is appropriate to source goods externally. Next confirming logistics assets are available is complex and requires integrated cross organisation supply planning.

Securing and managing appropriate transport and storage resources internationally, nationally and locally requires suitable logistics professionals and management systems at each level. Lack of these adds to the requirement for personnel transport especially around Ukraine. Whilst this configuration may not actively contribute to volumes of road freight transport, the continued use of ‘special lanes and measures’ to circumvent the normal crossing process does nothing to ease border congestion, and the validity of demanding such channels for prioritisation of most humanitarian cargo at this point could reasonably be challenged. Fuel scarcity and access to hard-to-reach areas is an ongoing issue, and applicable for most of the supply chain configurations.

Supply chain configuration ❷, international delivery direct to a national hub, is subject to the same challenges, but using 3PLs for direct delivery to national hubs reduces both resource supply planning complexity, the need to secure and manage upstream international transport and storage, and decreases the requirement for logistics personnel.
Supply chain configuration ❸, international delivery direct to local warehouses by 3PL, removes an additional layer of complexity with further positive knock-on effects on supply planning, transport, storage and logistics personnel requirements, where it can be employed.

Supply chain configuration ❹ relies on functioning commercial channels to make goods available for procurement in-country. Whilst a good understanding of the local market is required, all challenges associated with upstream logistics are eliminated for humanitarian supply managers, leaving them to focus on national and local operation. Delivering locally sourced products direct to local warehouses using 3PLs where possible - as with supply chain configuration ❺, alleviates the potential planning, transport and storage challenges further, and again reduces the need for logistics personnel.

Where it can be utilised, supply chain configuration ❻, usually achieved using MPC, is usually most effective and efficient method of providing assistance, and also the least susceptible to any of the identified challenges including fuel scarcity and potentially access issues. The main requirements are a good understanding of the market to ensure availability of items to meet needs, and mitigate any unintended consequences where it is employed.

4.3 Solutions to the Identified Gaps

As noted in the previous section, the primary mitigation measure for nearly all gaps is to ensure the most appropriate supply chain configuration is utilised. Taking this into account, the action most likely to reduce the negative effects of any gaps has been calculated, the primary implementer noted and the support the cluster should offer specified. This is summarised in the following table.

<table>
<thead>
<tr>
<th>Challenge (1)</th>
<th>Gap (2)</th>
<th>Action Required (3)</th>
<th>Who (4)</th>
<th>Logistics Cluster Role (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Fuel scarcity</strong></td>
<td>Fuel availability for operations continuity not assured.</td>
<td>Dedicated humanitarian fuel supply facility at appropriate locations provided on cost + overheads basis (in planning)</td>
<td>WFP</td>
<td>- Disseminate information. - Link agencies to service. - Encourage forecasting.</td>
</tr>
<tr>
<td><strong>2. Logistics professionals availability</strong></td>
<td>Difficulty to secure logistics professionals at all levels of the supply chain.</td>
<td>Minimise necessity for professions through configuration. Provide on the job training to upskill.</td>
<td>Agencies</td>
<td>- Support appropriate supply chain configuration with advice / resource information (4,7,8 &amp; 9). - Advise on and support training.</td>
</tr>
<tr>
<td><strong>3. Border congestion</strong></td>
<td>Long waiting times for trucks crossing borders into and out of Ukraine.</td>
<td>Supply chain planning time to include border crossing, Thoughtful use of established processes.</td>
<td>Agencies</td>
<td>- Monitor and provide process and planning information. - Work with Gov / OCHA s to further streamline as needed.</td>
</tr>
<tr>
<td>Challenge</td>
<td>Gap</td>
<td>Action Required</td>
<td>Who</td>
<td>Logistics Cluster Role</td>
</tr>
<tr>
<td>----------------------</td>
<td>----------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------</td>
<td>------------------------------------------</td>
<td>----------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>4. Transport planning</td>
<td>Availability of truck resources at agreed time and contract prices.</td>
<td>Adjust contracting process to be more flexible. Increase planning horizons where possible.</td>
<td>Agencies</td>
<td>- Provide transport suppliers list and up to date market info(^{42}) (7)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>- Consider dedicated fleet for Hard-to-reach areas.</td>
</tr>
<tr>
<td>5. Access to hard-to-reach areas</td>
<td>Ability to deliver assistance for distribution into conflict affected areas.</td>
<td>Provide a mechanism to engage authorities for greater access to hard-to-reach areas.</td>
<td>UNOCHA</td>
<td>- Lobby for and support engagement mechanism.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>- Support multi-agency capacity and flexibility to deliver (4 &amp; 9).</td>
</tr>
<tr>
<td>6. Aid worker transport</td>
<td>Ability to move national and international workers around Ukraine.</td>
<td>Decide on provision of shuttle for humanitarian agencies between strategic locations and inform for planning.</td>
<td>UNOCHA</td>
<td>- Lobby for OCHA decision.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>- Disseminate decision and associated information.</td>
</tr>
<tr>
<td>7. Local market capacity</td>
<td>Understanding of local capacity to provide products and logistics resources.</td>
<td>Carry out market surveys, including manufacturing rehabilitation, make available and monitor.</td>
<td>Sectoral Clusters</td>
<td>- Carry out market surveys for transport (incl. rail, river and sea) and warehousing.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>- Monitor and make information available (4 &amp; 9).</td>
</tr>
<tr>
<td>8. Supply planning</td>
<td>Supply plan development against which resources can be secured and delivered.</td>
<td>Confirm demand plan, and create supply plan as early as possible. Synchronise strategic activities.</td>
<td>Agencies</td>
<td>- Provide information for demand plan (3, 4, 5 &amp; 9).</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>- Create synchronisation platform and coordinate.</td>
</tr>
<tr>
<td>9. Storage planning</td>
<td>Ability to secure warehouses, primarily in and around hard-to-reach areas.</td>
<td>Minimise necessity for storage through supply chain configuration. Focus resources on critical assets.</td>
<td>Agencies</td>
<td>- Provide storage suppliers list and up to date market info(^{42}) (7).</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>- Consider dedicated storage near hard-to-reach areas.</td>
</tr>
</tbody>
</table>

5. Conclusion and Recommendations

5.1 The Changing Role of the Cluster

At the outset of the operation, a significant proportion of the Logistics Cluster’s resources were consumed providing transport and warehousing services, largely to fill capacity gaps for agencies, giving them time to put their own technical resources in place, configure their supply chains and adjust internal tools and processes to fit the context. As can be seen from the service usage figures most agencies are now up and running in this regard, but remain interested in engaging with IM and coordination support.

Whilst some limited common service provision is still valuable, specifically in and around hard-to-reach areas and for ad-hoc requests from partners with limited supply chain expertise, continuing to offer common services will do little to address the current and future gaps identified. An adjusted focus providing a greater range of planning information and coordination to help agencies implement the correct supply chain configuration is now required, reinforcing those products already provided.

The result of adjusting the cluster portfolio in this way will not only support the development of solutions to meet the gaps for the wider community, but also reorientate the cluster to its secondary role; providing ‘burst capacity’ to evaluate and deal with future service delivery gaps that require a provider of last resort, as they arise.

\(^{42}\) This may include WFP’s service provision products if partners want to take advantage of consolidated procurement – TBC with WFP.
There are plans for ongoing use of cluster common services from agencies who have not yet fully configured or developed their supply chain capacity or see value in consolidated service provision. The Logistics Cluster is neither mandated, nor resourced to provide effective and efficient services on a long-term basis in a competitive commercial market. The information products provided going forward will provide these agencies with guidance on how to continue accessing these services.

5.2 Recommendations

Recommendation 1 – Adjust the coordination and IM services portfolio. Review the current coordination and information products, adjust as required and ensure capacity to deliver products and services that support solving potential gaps. These will likely include, but may not be limited to:

- Coordination support for general information dissemination, systematic supply planning; specifically for large-scale initiatives such as winterisation, and delivery to hard-to-reach areas.
- Management and provision of information to support partners supply chain planning and operational decisions, including but not limited to streamlining of upstream supply routes including rail, sea, river and road transport, providing an understanding of logistics services market operation and capacity, sharing information related to physical access constraints, and connection cluster partners with reliable logistics service providers.
- Provision of ad hoc inputs to support cluster members supply chain operation such as technical advice on supply chain configuration, logistics capacity building for inexperienced teams or support to UNOCHA and other partners for setting up deliveries to hard-to-reach areas.

Recommendation 2 – Adjust the common services portfolio. Review the current provision of transport and warehouse services and adjust according to mandate and usage. The main components of this adjustment are likely to be:

- Withdrawal of transport and storage services where these are readily available, underused, or unlikely to be used in the near future. In general, this would apply to international services and national services in the west and toward the centre of Ukraine.
- Retention of a storage and transport services offer where they add value; for example, close to hard-to-reach areas, provision of a cluster dedicated fleet and warehousing facility to ensure availability of multi-partner supplies at short notice.
- Ongoing assessment of new services required that will add value, probably on a geographical basis and linked to last mile delivery.

Recommendation 3 – Monitor the situation and carry out an operational review. The context is highly dynamic and ability to react well to changes will be reliant on how early these are identified. In addition, given this is a different type of deployment for the cluster, there is likely great value in carrying out an operational learning review. Specifically, this means:

- Develop forward facing indicators which can be monitored to provide advance notice of any changes in the current situation.
- Whilst the GNA has taken some time and used substantial resources, the information provided is invaluable in ensuring the cluster is providing the best support it can for members. The exercise should be revisited to identify any changes or developments and updated around the end of September before operations move into winter programmes.
- Given the unique scenario, and the findings of this analysis, it is probable there are important lessons that can be learned and applied to improve future Logistics Cluster strategy and deployments, and so an operational review should be carried out covering the first 3 to 6 months.
5.3 Change Management Considerations

As the cluster adjusts its service portfolio, there are a number of change management issues that should be considered. The following are three of the most obvious, but also the most critical, and so worth mentioning.

**Coordination with current partners.** Any changes made, especially to service provision, should have the minimum adverse effect on the supply chains of partners currently using services. This may mean supporting transition of service provision to alternate providers, depending on the partner. In addition, it needs to be very clearly communicated that any partners who may require ad-hoc services, outside those offered as part of the new portfolio, will still be supported where possible.

**Possibility to return to closed locations.** Care should be taken to record key information on facilities and contacts at closed service locations and, if possible, a protocol developed and agreed to reopen these again at short notice if warranted by the situation.

**Logistics cluster team structure and profiles** – The structure of the cluster team should be reviewed, and adjusted if required to ensure personnel with the most appropriate skillset are assigned to products and services management in the relevant locations.

---

June 2022
Appendix 2. Breakdown of Data Sources

The graphs below show a breakdown of the interview group by type of organisation, the seniority of the personnel supplied and the sectoral and geographical areas in which the agencies operate.
Appendix 3. Breakdown of Challenges Identified by Interviewees

The differences between the INGO/NNGO/RCRC and the UN/ICA groups on respondents’ view of the prioritisation for current and future operational supply chain challenges is provided in the tables below.

<table>
<thead>
<tr>
<th>INGO / NNGO / RCRC Prioritisation of Challenges</th>
<th>UN / ICA Priorisation of Challenges</th>
</tr>
</thead>
<tbody>
<tr>
<td>challenge</td>
<td>current</td>
</tr>
<tr>
<td>Fuel scarcity</td>
<td>64%</td>
</tr>
<tr>
<td>Professional logisticians / capacity</td>
<td>36%</td>
</tr>
<tr>
<td>Border congestion</td>
<td>36%</td>
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<tr>
<td>Passenger transport</td>
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<tr>
<td>Local market capacity</td>
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</tr>
<tr>
<td>Supply planning</td>
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</tr>
<tr>
<td>Access hard to reach areas</td>
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</tr>
<tr>
<td>Storage planning</td>
<td>14%</td>
</tr>
<tr>
<td>Warehouse planning</td>
<td>7%</td>
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</table>
Appendix 4. Breakdown of Coordination and IM Provision

Three graphs further illustrating the initial demand for IM and coordination products and the current steady state are provided below. These focus on IM products, website hits and new additions to the mailing list.
Appendix 5. Breakdown of Common Services Provision

The data tables below allow the reader to interrogate how agency groups have utilised services in each of the service delivery locations. This covers the period 25th February to 31st May 2022.

### Storage m3

<table>
<thead>
<tr>
<th>Location</th>
<th>ICA</th>
<th>INGO</th>
<th>NNGO</th>
<th>RCRC</th>
<th>UN</th>
<th>Total</th>
<th>ICA</th>
<th>INGO</th>
<th>NNGO</th>
<th>RCRC</th>
<th>UN</th>
<th>% of total</th>
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<td>23%</td>
<td>25%</td>
<td>52%</td>
<td>34%</td>
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<td>72</td>
<td>266</td>
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<td>73%</td>
<td>27%</td>
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<td>96</td>
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<td>94%</td>
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<td>36%</td>
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<tr>
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<td></td>
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<td>53%</td>
<td>2%</td>
<td>36%</td>
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### Transport m3

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<th>NNGO</th>
<th>RCRC</th>
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<th>% of total</th>
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<tr>
<td>Dnipropetrovska</td>
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<td>100%</td>
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<td>Lvivska</td>
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<td>100%</td>
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</tr>
<tr>
<td>Podkarpackie</td>
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<td>Zakarpatska</td>
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<td>100%</td>
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<tr>
<td>Total</td>
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### SRF each

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<th>Location</th>
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<th>INGO</th>
<th>NNGO</th>
<th>RCRC</th>
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<th>% of total</th>
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<td>50%</td>
<td>38%</td>
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<td>23%</td>
<td>48%</td>
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