

Redistributing risk as a powerful driver
towards bigger, faster and more
sustainable change.

THE CARRIER AS A SUBCONTRACTOR MODEL (CaaS)

Carrier as a Subcontractor is an innovative model in which shippers and carriers can control equipment at a large scale to sub-contracted carriers.

The products and services to transport goods can be contracted in bigger quantities, ensuring the economy of scale and reducing the risk an investment in innovation brings.



The transportation of goods over land is an ever-important sector and shippers, equipment providers and carriers should take a lead in their efforts to improve mobility as a whole. Challenges like sustainable transport, carrier safety and reliable speciality transport are solved by innovations of the vehicle and service. Many opportunities are now not seized because of the risk involved for carriers.

They lack incentive and resources to make investments in a continuously updated fleet. Because of the flexible subcontractor contract shippers offer, carriers do not have the guarantee to put the fleet in use for the time it takes to get the return on investment. This is a great loss for the shippers, as they start lagging in the industry and are behind on meeting customer demands. The solution would be a three-party collaboration, in which the risks

are distributed so the shippers as well as carriers can contribute to, and benefit from, innovation. Equipment and service for transport would be contracted to a shipper or carrier, who in its turn subcontracts it to smaller carriers. The scale of the shipper would allow security in the investments, whereas the carriers benefit from an future-proof fleet. Together, we divide the risks and enable rapid adaptation to innovation.



THE EVER-EVOLVING TRANSPORTATION SECTOR

It is impossible to ignore the importance of innovation. According to Baregheh et al., innovation is defined as ‘the multi-stage process whereby organisations transform ideas into new/ improved products, services or processes, in order to advance, compete, and differentiate themselves successfully in their marketplace’⁽¹⁾. It has been proven that innovation leads to economic growth⁽²⁾ and is founded in research and development⁽³⁾.

So we see the world changing continuously and at great speed. Good logistics is the key to unlocking the full potential of our current global economy by connecting people and business all around the world⁽⁴⁾. The transportation sector is especially connected to this push for innovation. New technologies, regulations, customer demands and industry standards require constant adaptation⁽⁵⁾. The stake is high, with an estimated global revenue of US\$ 5.2 trillion⁽⁶⁾ and the way to remain relevant is to be proactive in changes. That is why it is important for all businesses that facilitate the transportation of goods to adopt an agile mindset and embrace innovation in their day-to-day policy.

RISKS IN THE UNKNOWN

Not every party is in the position to invest in the necessary research or development of innovative products and services. The risk lies in the probability that all the hard work and money do not lead to valuable new insights or designs. Once a company has adopted the agile mindset, access to capital is a very important factor to translate vision into reality. Financial resources can attract new employees with critical expertise, it can fund new technology development and also extend coverage.

The problem however lies with the absence of capital in the small to medium sized carriers. From a strategic analysis of average operating margins between 2011 and 2016, PwC found that carriers are more likely to have zero profit whereas large couriers, express and parcel companies (CEP) are the most profitable group⁽⁴⁾. In the current model, the carriers are responsible for acquiring equipment and therefore have a big influence on the relevance of certain technologies. A problem emerges in which the carrier is required to initiate innovative endeavours but is prone to take no risks because of their small capital.

“Contracts between shippers and carriers are typically shorter than the technical life of the equipment. Carriers are not always capable of carrying this risk and shippers are still in need of transport of their products. By taking a bit more control, without the risk, shippers and carriers can benefit from the technical & economical life of the equipment, hence also accelerating on their sustainability ambitions.”

**ROGIER LAAN,
VICE PRESIDENT SALES &
MARKETING AT TIP TRAILER
SERVICES (EQUIPMENT SERVICE
PROVIDER)**



SHARING THE BENEFITS

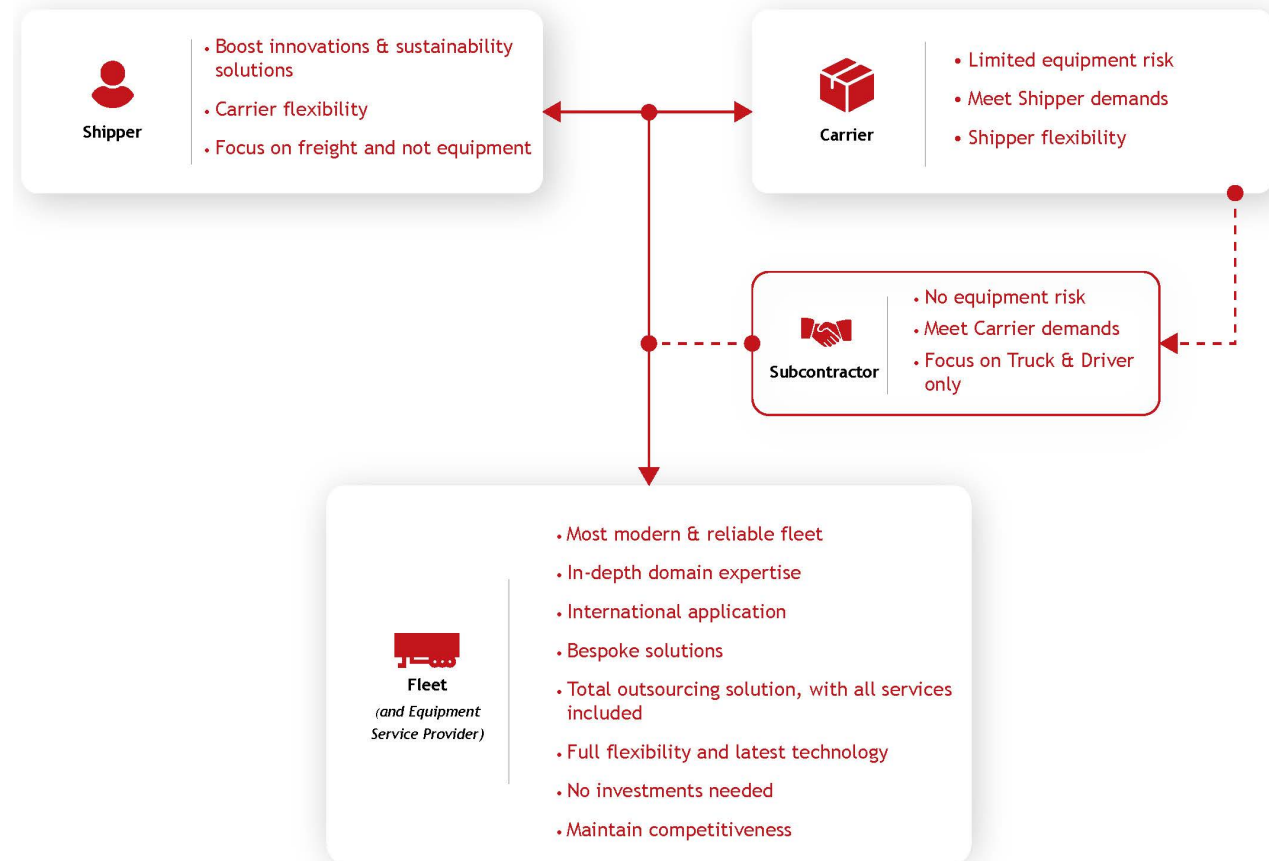
That is why this whitepaper proposes a redistribution of risks and rewards between the three parties that hold the most stake to enable research and development throughout the chain.

In the Carrier as a Subcontractor (CaaS) model, a stable connection is made between the Equipment Service Provider and the Shipper/Carrier. They agree upon the features of their fleet and together make sure it is always future-proof. The shipper/carrier then finds and hires sub-carriers who lease the equipment and makes sure that the equipment will be utilised, irrespective of the carrier. In the form of subcontracting, the shipper/carrier has control over the kind of equipment and service and the sub-carrier bears less risk while being able to work with better products.

Shippers as initiators

As you can see in the image right, it is the shipper who initiates the transportation process. They want to move a certain good from A to B to fulfil a customer's needs. Most of these shippers are large and enjoy economies of scale. Because of their initiating position in the chain, they bear the public responsibility of the transportation⁽⁷⁾. This means they have to keep up with the increasing customer demands of their delivery while simultaneously keeping up with competitors' offers. This means that the nature of the delivery and an updated fleet is quite important for the shipper. The strategy of these companies is to recognise needs and use new technology to keep up with them. It is obvious that they hold a major stake in equipment innovation and have the stability to co-invest.

In the Carrier as a Subcontractor model the shipper/carrier would align with the equipment provider. They mutually agree on the desired products and services for the fleet of the shipper/carrier and the period of the collaboration. The equipment service provider is responsible for arranging the desired vehicles, maintenance and support.





“Sustainable innovation only makes an impact when you implement it on a bigger scale. I see value in the Carrier as a Subcontractor model because it can accelerate the growth of such an innovation”

**MARK RICKHOFF, HEAD
OF LOGISTICS BENELUX AT
UNILEVER**



Facilitating the carrier

Shippers often are not doing the actual transport themselves. They outsource this to carriers based on tenders they set out yearly. Carriers in their turn can outsource the transport again to sub-carriers or do it themselves. The Carrier as a Subcontractor model is especially valuable for the small to medium size carriers since they do not enjoy the economy of scale that is needed to invest in a future-proof fleet. The carrier still contracts with the provider in this new model, but the Shipper can take over the control of the equipment when they want to change carrier. The small to medium sized carrier is then relieved of its responsibility to take costly risks for the equipment they might not need next year.

Via the shipper’s contact with the equipment service provider, they enjoy vehicles and services that fit the shipment best. This will add in customer and employee satisfaction over time. Not only is it better for the experience, it also gives carrier a headstart in complying with legislation⁽⁸⁾.

Knowing the material

The equipment service provider has direct contact with the shipper/carrier and the sub-contracted carrier in the Carrier as a Subcontractor model. This means they can fulfil the needs of both parties the best they can, without the insecurity of short-time contracts. It will enhance the quality of the products and give space to innovate on their products and services.

The advantage is that the research and development (R&D) of transportation equipment is done by the party whose focus is on that area, the Equipment Service Provider, making the approach more trustworthy and valuable⁽⁹⁾.

MERITS OF THE UNKNOWN

Investing in innovation creates a lot of new opportunities for carriers and shippers. Companies can tap into a whole new pool of insights and designs that can disrupt the market and show possibilities beyond current ideas. But it is not only a tale of the future, innovation can also deal with challenges that the logistics sector now faces: the growing pressure on the climate pushes transportation to be more sustainable, we want everyone to be able to work safely and some products require special circumstances to be transported.

Climate neutral mobility

The release of IPCC's Sixth assessment report has made it clear once more, climate change poses a big threat for humanity and we have to act on it⁽¹⁰⁾. The United Nations released 12 goals to develop a more sustainable world, called the Sustainable Development Goals⁽¹¹⁾. At the 26th UN Climate Change Conference of Glasgow in 2021, the final accord included that supply chains must commit to achieving a fully zero emission fleet by 2030⁽¹²⁾ making it more relevant than ever to double down on our efforts to reduce the impact of our sector on the environment.

Implementation of sustainable transport has multiple anchor points in the context of infrastructure, goods delivery, affordability and as improving urban air quality⁽¹³⁾.

Safety of drivers and their surrounding

Employee satisfaction has been a big topic in the delivery industry in recent years⁽¹⁴⁾. Because of the growing need of drivers in the carrier sector and increased traffic with valuable goods by third parties, protecting your people becomes more important⁽¹⁵⁾. It is also in the interest of the shipper since satisfied employees lead to happier customers⁽¹⁶⁾. A priority should be the safety of the vehicle against accidents or people with malicious intentions. There are challenges that would require a technical solution but we believe that through the innovation of products and services, we can improve safety and make working as a carrier more comfortable.



“For the first time we have a unified target, supported by leading governments and industry, for when new trucks (...) should fully transition to zero-emission technologies.”

DR. CRISTIANO FAÇANHA, GLOBAL DIRECTOR AT CALSTART



Reliable speciality transport

We have realised that shippers are becoming more aware of the benefits of speciality equipment that is adapted to specific needs of certain goods. The perfect temperature for fruit and vegetables need adapted trailers and shipping over seas require good cargo securing. Making products and services that fit a specific sector exactly would mean more efficient transport and higher quality delivery. For this, highly personal technical innovation is necessary. Creating the alignment between the shipper, who is an expert in the specific needs of different

freights, and the equipment service provider, who has knowledge on possibilities to do this, would mean a most effective outcome.

ECONOMY OF SCALE

The Carrier as a Subcontractor model is not only great when parties want to develop new technology. If we look at the benefits for shippers and carriers as of today, the collaborative approach will grow the economy of scale for each party. Working together ensures a big platform where shippers and carriers have more control but also more cross-organizational collaboration.



“Making speciality transport, like our temperature controlled logistics, dynamically deployable over multiple regions would increase the usage of one vehicle.”

JOOST VISBEEN,
CEO AT DLG



This could be a first step towards a more efficient chain of logistics in general and eventually a synchronisation of intermodal services. According to the European-wide vision of the Logistics Alliance for 2040, if we can collaborate efficiently with different modes of transport on an operational level, we can best serve supply-chain current and future needs⁽¹⁷⁾.

A THREE PARTY COLLABORATION

To change from the current one-on-one contracts of equipment providers with carriers to the future Carrier as a Subcontractor model, the three parties have to work together. The carrier business is too dynamic to build innovation on and we have to reimagine the way assets are leased. In dialogue with shippers,

sub-contracted carriers can lease equipment that is guaranteed to be put into use for a longer period of time. The benefits are clear but making the transition required commitment. When the shipper/carrier can agree with the equipment service provider how long and in what configuration it will be used, all parties can enjoy economy of scale and accelerate innovation in the transport industry.

“In essence, it is about managing risks. We’re in a constantly transitioning market and the key is to secure use for the assets that require big investments. ”

THIERRY VERDUIJN, ASSOCIATE PROFESSOR SUPPLY CHAIN INNOVATION AT HZ UNIVERSITY OF APPLIED SCIENCES



6 BENEFITS IN A ROW

- Grow the economy of scale for each party
- Reduce the risks of investment in innovation
- Supply the carrier with the best products possible
- Integrate shipper vision throughout the whole logistic chain
- Better use of the knowledge of the equipment provider
- Enrich collaboration to serve supply chain needs

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