

All international supply chains are impacted by the effects of globalisation, be it from competing markets or erratic economies. The result is increasingly unpredictable demand and in turn unpredictable volume. In such an environment, managing cash-flow within a business becomes key. Dealing with these pressures on a day-to-day basis and making the best decisions in a dynamic and fluid environment relies on real-time visibility of the supply chain. In a network scenario this requires the individual depot planners to have the maximum visibility of freight in transit inbound or outbound from their depot and beyond. This enables the planning of inbound freight to outbound manifests before the freight has physically arrived. Across the entire network, there is also a need for a 'control tower' view of the supply chain giving central planners the visibility and information required to make network wide adjustments to operations to maximise efficiency and profitability. Provide both a localised and global visibility and planning environment is the role of ProAct's freight management functionality.

Total freight management

ProAct's freight management functionality allows both quotations and orders to be captured and processed over the internet along with all the required attributes including amongst other things; weight, volume, SKUs, units and pickup/delivery locations.

The solution uses both its depot and network view of the supply chain along with network rules to determine a consignment's correct and most optimum route through the supply chain. In the network example below, the solution would use its knowledge of the physical network and operational rules to determine, for example, the routing of a consignment between Dublin and Frankfurt. There may be a number of possible routes in this example, but ultimately the job would be transhipped via Paris.



ProAct solution benefits:

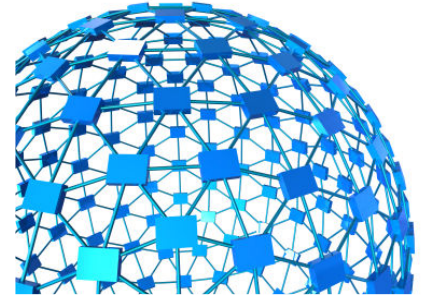
- **Web based quote/job entry functionality**
- **Automated planning and execution of complex networks**
- **Elevated governance and control**
- **Enforced process compliance and disciplines**
- **Enterprise level control tower and portal**
- **Network and depot level visibility through local/global planning control tower**
- **Detailed control of cost, revenue with automated cost apportionment/margin calculation**
- **Flexibility to deal with unpredictable demand**
- **Optimal up/down stream planning to maximise load efficiency**

Whatever the routing, the solution is simply applying 'user configuration' rules to the network to determine routing in one of two modes; predictive or ad-hoc. In predictive mode the solution will plan its transshipment point through to final delivery. In ad-hoc mode, only the next transit point is calculated. Ad-hoc offers the potential for more efficient equipment utilisation and load planning whereas the predictive mode offers wider forward visibility to the network.

Both local and central planning & control

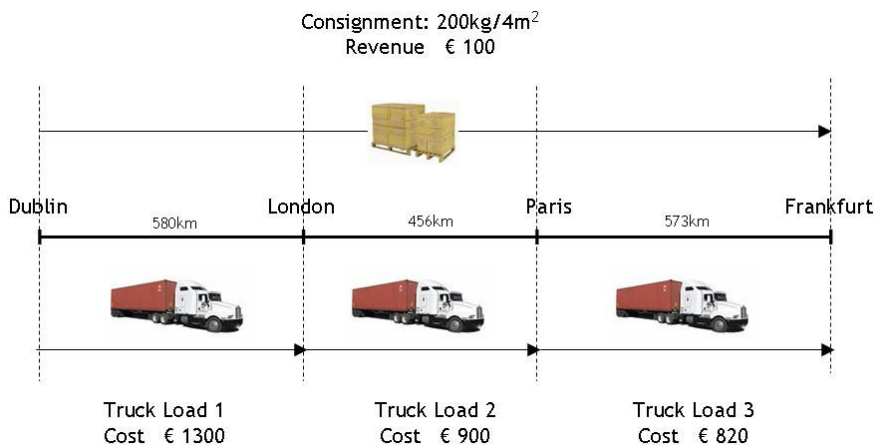
Both modes can therefore also be used together to provide the best of both worlds on the understanding that planned job routings may change automatically should a more efficient path be determined. At the point an outbound load is confirmed at the source depot, the recipient depot will have the capability to include the consignments within its own outbound planning.

However, until the inbound load is despatched and has been confirmed as arrived, the recipient depot cannot confirm or despatch its own outbound loads. Ultimately, planning can be performed on either a wholly localised basis across the network, centrally for the entire network or a combination of both. In all cases, the system provides complete network wide visibility of the entire supply chain. Given the appropriate scope and authority, a depot based user can have full visibility of consignment at any other combination of depots.



Cost and revenue apportionment

In addition to managing the physical planning activities across the network, the solution will also manage the calculation and apportionment of cost and revenue across the network. Individual shipments may be transhipped one or more times and therefore travel on multiple physical loads. The system will therefore capture and allocate the component costs of the shipment against the revenue accrued. Revenue will typically be calculated from source address to destination address based on a zonal designation, where as cost must take into account multiple point to point activities based on shared resources.



Apportioned cost and revenue can therefore ultimately be compared to determine if a suitable revenue margin has been achieved. Cost may also take into account empty legs and may also be impacted by the potential for back-hauls.

Visibility and collaboration

Throughout the entire freight management process, all participants have the potential

for full visibility of and interaction with (based on user profile) the entire supply chain activity. Potential carriers can also log on and participate in loads and ultimately the system can self-bill them for confirmed activities.

Freight management - key features include:

- Network logistics planning
- Inter-depot loads
- FTL / LTL equipment manifests
- Split/Merge of cargo
- Automated planning
- Capacity restrictions
- Final destination network routing
- Consolidation depot preferences
- Consignment rating
- Multi-leg cost apportionment
- Automatic cargo unload

- Consignment order management
- Rate shopping
- Automatic tariff selection
- Transport segments (instances)
- Consignment tracking and enquiries
- Consignment enquiry
- Equipment management
- Consignment debrief
- Charging, billing and invoicing