Training Manual

Sustainable Freight Transport: Improving the Environmental Performance

The UNCTAD sustainable freight training course on "Sustainable Freight Transport: Improving the Environmental Performance" consists of 14 modules (figure 1) comprising numerous PowerPoint presentations.

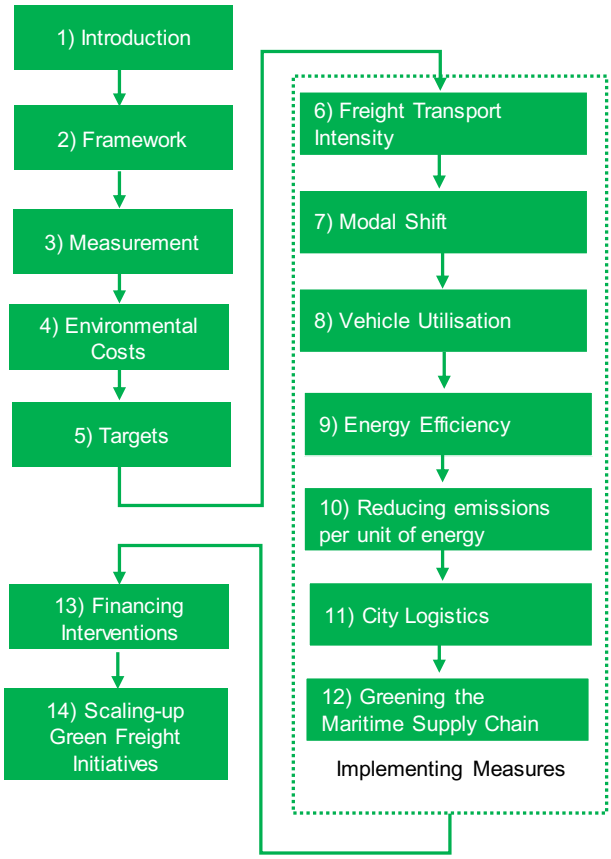

Figure 1 UNCTAD Sustainable Freight Training Modules

The main objective of the training course is to raise awareness and build capacity among the stakeholders to help them develop and implement **environmentally** sustainable freight plans and strategies.

The scope of the toolkit material focuses on - transport infrastructure and operation of freight vehicles across all modes (namely roads, railways, and waterways) plus inter-modal interchange, the design of the logistical systems within which deliveries are organised, transport and communication infrastructure used by freight vehicles, planning and financing of freight transport operations and related infrastructure & measurement and monitoring. Examples of the private sector and the government initiatives are also highlighted.

The following questions are addressed during the training course

1. *How important is sustainability relative to the other freight transport imperatives/objectives?*
2. *How should the distribution of freight among transport modes be changed to improve environmental sustainability?*

3. *What economic, social and environmental factors should be included in a Sustainable Freight Strategy (SFT)?*
4. *How should these environmental impacts (or 'externalities') be prioritised and why?*
5. *How important are the environmental impacts and their integration into a SFT Strategy?*
6. *To what extent should environmental goals be traded-off against economic and social objectives?*
7. *What stakeholders should be involved in the development, implementation, monitoring, evaluation and review of the environmentally-sustainable strategy?*
8. *What should be the role of the government/public authorities, the private sector/business in developing, implementing, monitoring, evaluating and reviewing the SFT Strategy?*
9. *What monitoring schemes are currently in place and who operates them?*
10. *Which social, economic and environmental impacts are measured and by what means?*
11. *What are the current shortcomings in the measurement and monitoring and how can they be overcome? What are the obstacles, challenges, solutions adopted so far/being considered?*
12. *What are the needs/gaps in this respect and who are the relevant stakeholders?*
13. *What are the improvement options for sustainable freight transport suitable for the corridor, city or country?*
14. *How effective are current government policies on freight modal shift within the region?*
15. *How is the current investment in transport infrastructure across the region affecting the freight modal split?*
16. *What more can be done, by all stakeholders, to get more freight onto more sustainable modes of transport, whether rail, inland waterways or intermodal services?*
17. *How serious is the vehicle empty running problem? Are there statistics available? How are these collected and where can they be obtained.?*
18. *What is the potential for increasing the level of backloading?*
19. *How big are the sustainability benefits accruing from the optimisation of vehicle loading – i.e. minimising under- and over- loading.?*
20. *How is transport (truck, rail, maritime) fuel efficiency in this region constrained?*
21. *To what extent does traffic congestion (roads, ports), the age and condition of vehicles, driver skill level etc. contributes to undermining energy efficiency?*
22. *What initiatives, if any, have been tried to improve freight transport fuel efficiency, including truck fuel efficiency and what has been their impact?*
23. *What policies should governments be implementing to improve the fuel efficiency of freight transport?*
24. *What is the potential for increasing the energy efficiency of freight transport operations?*
25. *What are the prospects for upgrading emission standards for new and existing vehicles to European standards over the next 5-10 years?*
26. *What are the factors constraining the upgrading of emissions standards?*
27. *To what extent is the upgrading of emissions standards constrained by poor fuel quality?*
28. *How can freight transport companies be most effectively incentivized to cut their exhaust emissions?*
29. *What are the barriers to switching freight transport modes to cleaner energy sources and how can they be overcome?*
30. *How should a sustainable freight transport plan be developed to meet institutional, technical, financing and stakeholder ambitions over different time scales?*

The training can be tailored to suit the expectations and needs of a diverse set of stakeholders from developing countries from different regions.