## 6. SUMMARY AND CONCLUSIONS

- 6.1 The work undertaken by the SEA clearly contributed to the development of the rail network expansion proposals.
- 6.2 The SEA demonstrated the environmental advantages of adopting rail over road, and highlighted that discrepancies exist in the appraisal processes used for these two transport modes which make it harder to implement rail projects. To ensure that the full environmental benefits associated with rail can be taken into account, it is recommended that more emphasis should be placed on the environmental aspects in the project evaluation procedures.
- 6.3 Through the identification of conflicts with absolute constraints, a number of potential rail schemes were rejected on environmental grounds in the early stages of the Study.
- 6.4 A number of railway network development options have been developed. Within each of these options, the Component Schemes are predominantly underground and therefore the environmentally impacts are substantially reduced from equivalent above ground alternatives.
- 6.5 Strategic level environmental assessments were undertaken for each of the proposed rail expansion schemes. At a strategic level, none of the schemes were considered likely to give rise to insurmountable environmental impacts. To ensure that the potential impacts that have been identified are carried forward and addressed throughout the scheme development process, Strategic Environmental Monitoring and Auditing recommendations have been made which should ensure that, environmentally, the resulting rail network performs at least as well as predicted in the Strategic Environmental Assessment.
- 6.6 In summary, the SEA played an integral role in RDS-2 and the development of the rail network expansion proposals, ensuring that environmental considerations were fully taken into account. In particular, the SEA clearly established the environmental benefits that could be accrued from promoting rail in preference to road, and, for the expanded network, highlighted that (assuming the major network assumptions used in the CTS-3 medium scenario) for NOx and RSP and CO<sub>2</sub> "savings" of up to 669, 61 and 181,000 tonnes/annum respectively could be achieved. The savings in NOx and RSP could make an important contribution to improving Hong Kong's road side air quality.
- 6.7 With the majority of the schemes proposed to be constructed underground, the potential for environmental impacts has been greatly reduced and no insurmountable environmental problems are anticipated from the construction or operation of the rail network expansion proposals.