INTERNATIONAL STANDARD

ISO 37162

Second edition
2023-11

Smart community infrastructures — Smart transportation for newly developing areas

Infrastructures urbaines intelligentes — Transport intelligent pour les territoires en développement

Contents

Introduction

Although overall populations in developed countries have started to decrease, many cities are looking for more space for citizens to reside and locate businesses, and are developing untouched land, since space for development is limited in existing cities. Developing countries whose population is sharply increasing are also in the same situation due to these population explosions and the shortage of places for comfortable city life and effective business expansion.

A newly developing area is a type of district newly planned and developed to achieve such goals where the land has never been developed but is located within commuting distance of the current main city centre. Once a typical newly developing area is built up into a small- or medium-sized city near a metropolis, it is often called a satellite city.

In order to establish a newly developing area, passenger transportation services are indispensable as an easy means of travel from place to place inside the area and between the area and established cities nearby. 24-hour transportation plays a key role in supporting the sustainability of a newly developing area since transportation performance directly creates a strong bond between citizens' lives and business activities, i.e. transportation, if suitable, contributes to successful development and fostering of newly developing areas. The transportation services should therefore be carefully organized.

In most cases, the size of a newly developing area is not huge, but the population itself can be large. Thus, a relatively high frequency of transportation services rather than a high capacity per service is required. Transportation services shall be able to accommodate planned passenger numbers in expected passenger flows. The geographical features of a target site and the characteristics of the town planning will dictate specific transportation performance. It is not unusual to place newly developing areas in hilly terrain since easily cultivated land has probably already been used. Financial circumstances are likely to force transportation routing to take courses that do not require building a tunnel through a hill but instead lay tracks on hills, even if steep. Flexible track arranging responds to the restrictions of local policy-oriented conditions by placing ground tracks, underpasses or overpasses, viaducts and small curves alongside public roads.

In the development of this document, ISO Guide 82[1] has been taken into account in addressing sustainability issues.