4.1. Data quality, privacy and ethical aspects

Data quality has an important role in building confidence in the products produced by an institution. Quality assurance forms an integral part of statistics production at any statistical office. There are several factors that make tourism statistics unreliable or undercoverage when using traditional or non-traditional methods. Coverage is usually the main challenge of tourism statistics. Traditional data collection systems are mainly dependent on samples and enumerators which may not cover the whole target population and some subsets may be excluded from the statistics. During the survey (cross border survey) it is a challenge to capture the people that going in (especially at the place there is no border gates or no immigration checkpoints). Another limitation is related to the timeliness: data is collected once in several years. Even though the survey is conducted annually, the data processing took quite long. On the other hand, administrative data is considered as a quantitative rather than qualitative data source. Given the issue on coverage, it is important to ensure that tourism statistics collected from either source are in reliable and have high quality.

Privacy and ethical aspects. The issues of privacy, surveillance and fundamental rights are important aspects of mobile positioning. Any study conducted with the use of MPD must ensure the personal privacy avoid discrimination and respect fundamental rights, as the data may contain sensitive information. The information should not allow to identify individuals or groups on geographical or temporal grounds, that is, it should not be possible to extract individual or groups movements from the MPD. Every cell has a certain geographical coverage area and unique identity code, as in Cell ID method. To keep confidentiality, mobile operators can aggregate anonymous geographical data from log files, such as location points or movement vectors, and data users can use this for scientific purposes or for planning.