

## 3.2 Sites and Periods

### 3.2.1 Sites classification

In order to categorize the different sampling points, categories and subcategories were defined specifically for Cyprus. The density of the sampling sites was based on the spatial variability of the pollution levels, which vary with the type of pollutant, source distribution, local orography and meteorology. In Table 3.2. the number of sites and their classification are listed.

Table 3.2. Sites and Categories

Categories	Subcategories
<b>Urban</b> GCC: 145 sampling points TCC: 34 sampling points	Urban background (city center) Industrial Commercial Peripheral Recreation Residential Traffic Airport
<b>Rural</b> GCC:68 sampling points TCC:23 sampling points	Agricultural Mountainous with forest Mountainous without forest Touristic Touristic beach Traffic Village <700 Village >700 Sensitive area

### 3.2.2 Sampling Periods and exposure times

The required sampling period shall cover 14 % of the reference period of the one year limit value for NO<sub>2</sub>, SO<sub>2</sub> and VOC, according to Council Directives 1999/30/EC (1999) and 2000/69/EC (2000). For O<sub>3</sub>, the minimum time coverage shall be greater than 10% during summer time as required in Directive 2002/3/EC (2002). In Figure 3.2. the periods and exposure times for all diffusive samplings are graphically illustrated.

In this Preliminary Assessment NO<sub>2</sub> and SO<sub>2</sub> were sampled every second month over one year period. The exposure time per campaign was one month, therefore the time coverage is approximately 50% within the year's period. The sampling period for VOCs was 15 months, having each campaign a duration of 1 month, thus, the time coverage is 100%. The sampling period for O<sub>3</sub> was 28 weeks evenly distributed over 14 months. As it can be seen in Figure 3.2., the O<sub>3</sub> samplings took place two times per month (1 week per campaign) with the exception of the last four campaigns, which took place continuously in one month (August 2003). The time coverage for O<sub>3</sub> was therefore approximately 50% over 1 year and the same over 14 months and summer time.

Thus, the time coverage requirements of the aforementioned directives are fully complied.

Pollutant	Period of exposure per Campaign	Total No. of Campaigns	2002						2003									
			Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug <sup>1)</sup>	Sep <sup>1)</sup>	
NO <sub>2</sub> SO <sub>2</sub>	1 month	8	█		█		█		█		█		█		█		█	
VOC	1 month	15	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
O <sub>3</sub>	1 week	28	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█

1) Additional NO<sub>2</sub>, SO<sub>2</sub>, and VOC measurements in August and September 2003 were performed only at a certain number of sampling sites.

Figure 3.2. Periods and exposure times of Diffusive Samplings for NO<sub>2</sub>, SO<sub>2</sub>, VOCs and O<sub>3</sub>