Malé Declaration emissions inventory workshop Delhi, India, 2010

Exercise 5b: Filling in dummy data for – *Combustion in transport (detailed)*

1. Continue working with the workbook **'Malé Inv workbook Version 3_test data.xls'** you saved at the end of Exercise 5a.

2. Go to **Menu 3** and then go to **Sheet 1.9.1 Emissions for LTO and cruise activities of domestic aircraft.**

3. In column A, enter **12000** as total number of LTOs for aircraft of ***'Type unknown (average fleet)'* only** and then default values for Fuel consumption per LTO, and emission factors for SO_2, NOx, CO, NMVOC, PM_{10} and $PM_{2.5}$.

4. Go to **Sheet 1.9.2 Emissions for LTO activities of international aviation.**

5. In column A, enter **4000** as total number of LTOs for **Airbus A310 only** and then default values for SO_2, NOx, CO, NMVOC, PM_{10} and $PM_{2.5}$ emission factors.

6. Check if the total for ***Civil aviation (detailed)*** carried forward to **Summary Sheet 9** are correct (see table below). (**Notice** that emissions from the simple method for civil aviation are now set to zero to avoid double counting).

7. Go to **Sheet 1.9.3. Mobile emissions of NOx, CO, NMVOC and PM (detailed) for on-road vehicles.**

8. For **Gasoline Passenger cars made between 1996-2000 only**, enter **10000** as number of vehicles in use, **20000 km** as average annual distance travelled per vehicle, **50%** as percentage distance travelled on unpaved roads, and the default EFs for NOx, CO, NMVOC, NH_3, PM_{10} and $PM_{2.5}$. Assume **50% dry days** in column U.

9. Check if the total emissions for ***Road transportation (detailed)*** carried forward to the **Summary Sheet 9** are correct (see table below). (**Notice** that emissions of NOx, CO and PM from the simple method are now set to zero to avoid double counting).

10. **Save** your workbook.

From Summary sheet – Annual emissions of each pollutant by source sector in kt/yr.

Sector	Sub-sector	Total emissions (kilotonnes pollutant per year (kt/yr))						
		SO_2	NO_x	CO	NMVOC	NH_3	PM_{10}	$PM_{2.5}$
3. Transport	Civil Aviation (Simple--not used if Detailed used)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Civil Aviation (Detailed)	0.03	0.38	0.28	0.03	0.00	0.01	0.01
	Road transport (Simple--not used if Detailed used)	0.17	0.00	0.00	0.25	0.00	0.00	0.00
	Road transport (Detailed)		0.28	1.00			6.32	0.96
	Railways	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Navigation	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Pipeline transport	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Non-specified transport	0.00	0.00	0.00	0.00	0.00	0.00	0.00