

1 Instructions for CDM CBA generic airport template

1.1 Introductions

The [Airport CDM CBA \(EEC Note 18/05\)](#) involved the development of a CBA model using Microsoft Excel. The model consists of a summary spreadsheet which is linked to seven individual spreadsheets for each airport involved in the study. A template for the model has also been produced and this document contains a set of instructions on how to use this template which has been based on a generic airport. There are several Excel sheets within the template containing information on the following:

- Inputs
- Calculations
- Outputs
- Costs

1.2 Inputs

The input parameters for the model are in the sheet titled 'Input Parameters'. The following table describes the information contained in each column of this sheet.

Column	Name	Description
A	Category	This defines the type of parameter used. The options are <i>generic</i> (where the parameter is not specific to a particular airport,) <i>local</i> (where the parameter is specific to the airport) and <i>rough estimate</i> (where a study team estimate has been made).
B	Classification	This is the category of variable, e.g environment or ATC related.
C	Parameter	This column contains a descriptive name for the parameter.
D	Value used	This is the value used in the calculations and is currently set to use the medium value from the 'Airport range of values'.
E	Name	Each of the values in column D have been assigned a name. This is so that the cells in the calculation spreadsheets have names rather than numbers and can therefore be understood more easily.
F	Unit	This contains the units for each parameter e.g Euros, Kg/min etc
G-I	Default range of values	This contains a set of default parameters which can be used if the specific airport parameter is not known.
J	Distribution	This functionality is currently not used in the model.
K-M	Airport range of values	This contains the set of parameters specific to each airport. In this example they are the same as the default parameters as this is a template for a generic airport.
N	Source	This contains the sources from which the parameters have been derived. In the full model, some of these parameters have been determined from the analysis of specific airport data, however for the generic values, conservative estimates have been made by the study team.

1.3 Calculations

The calculation spreadsheets are listed below:

- **B1a Fewer lost slots.** Described in section 4.2.1 of the report.
- **B1c Departure Punctuality.** Described in section 4.2.2 of the report.
- **B2b Reduced out-bound taxi-time.** Described in section 4.3.1 of the report.
- **B2e Reduced ground emissions.** Described in section 4.2.3 of the report.
- **B4a Reduction in delay.** Described in section 4.3.3 of the report.
- **B6a Improved cost efficiency.** Described in section 4.3.2 of the report.
- **B6c Improved customer service.** Described in section 4.2.5 of the report.
- **B6e Increased capital product.** Described in section 4.3.5 of the report.

- **B6g Improved cost efficiency.** Described in section 3.4 of the report.
- **B6h Improved cost efficiency.** Described in section 3.4 of the report.
- **B7a Reduced in-bound taxi-time.** Described in section 4.3.4 of the report.
- **B7d Reduced ground emissions 2.** Described in section 4.2.4 of the report.

The inputs parameters described in the previous section will be fed in to these calculations where appropriate.

1.4 Outputs

The outputs for this model can be found in the spreadsheet titled 'Summary'. The following table describes what is contained in each column of this sheet.

Column	Name	Description
A	Reference	This contains the reference to the sheet where the calculation can be found.
B	Airport	The name of the airport can go in this column
C	Impact	This defined whether the information is a cost, a financial benefit or an economic benefit.
D	Recipient	This contains information on the recipient of the benefit e.g airlines, ground handlers
E	Description	This is the name of the benefit
F	Year 1	This contains the value for each benefit for Year 1.
G	Year 2	This contains the value for each benefit for Year 2.
H	Average on-going	This is the average benefit for year 3 onwards.
I-W	Years 2005 – 2019	This contains the values for each individual year.

1.5 Costs

- 1.5.1 Information on costs is in the sheet titled 'Cost summary'. The two tables at the bottom of this sheet contain information on both the costs and effort associated with Airport CDM. This information is also fed into the 'Summary' sheet, rows 6-10.