

BEONTRA

B Route Development

Version 3.5.0
Release Notes

14th March 2018



Release Notes Version 3.5.0

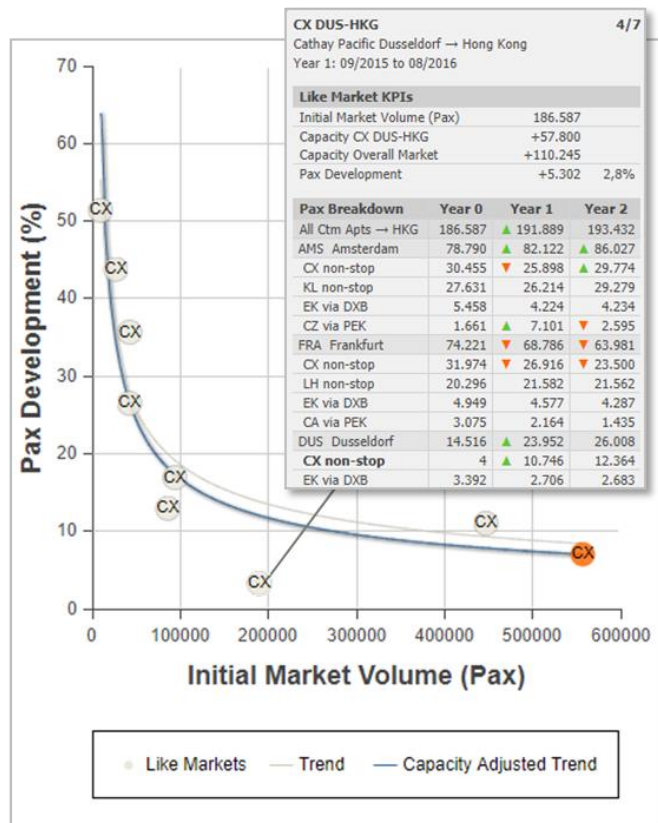


Improved Market Stimulation Methodology

- Redesigned, easy to understand stimulation curve
- Detailed insights into Like Market development
- Hints on further market development in year 2

Release Notes Version 3.5.0

Highlights of the Improved Stimulation & Growth Methodology



Redesigned, easy to understand stimulation curve

- Initial market size is used as the basis (x-axis), which is widely used in common stimulation models.
- Simplifies understanding and comparing Like Markets.
- Automated calibration of the trend curve to take into account the different levels of capacity added.

Detailed insights into Like Market development

- Find the capacity and pax development for the carrier and the overall market at a glance.
- Understand growth effects and traffic shifts between airports and carriers (cannibalization).

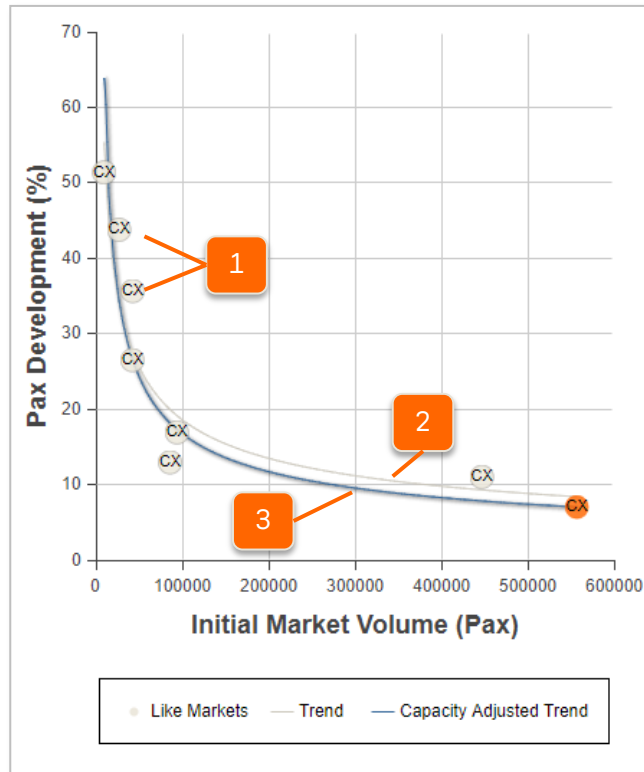
Hints on further market development in year 2

- The trend curve and projected stimulation rate are based on the development at the Like Markets in year 1 (first 12 months after launch).
- Get a hint on the long-term growth effect from the analysis of the Like Markets' development in year 2.

Release Notes Version 3.5.0

Stimulation Methodology Description (1/2)

The objective of the Growth & Stimulation section is to project the market growth. A growth rate for the first year of operation is suggested, whereby a near-term commencement is assumed. The analyses help understand to which degree the carrier is expected to create new demand rather than to cannibalize other carriers or catchment airports. For the point-to-point route, the market growth is based on a stimulation curve as described below. For beyond routes, a different approach is used (natural market growth, please refer to the user guide for details). The methodology for beyond routes has not been changed.


1

Like Markets (Gray Bubbles)

A stimulation curve is individually created for your scenario based on Like Markets, i. e. similar routes which have been launched since 2008. These may be routes by the target carrier, routes by any carrier from your airport or to the destination market or even other routes that show similarities to the market that your route study refers to. You can customize the selection of Like Markets, e. g. to create a purely carrier specific or market specific trend curve, depending on what makes most sense to you in your scenario.

2

Like Market-Based Trend Curve (Gray Line)

The gray line shows the correlation between initial market volume in the 12 months period before the launch ("Year 0") and pax development (market stimulation) in the first 12 months after the launch ("Year 1"). Typically, smaller markets experience a higher relative growth than large markets. The curve is determined through a regression analysis of the Like Markets. Since a power function is used, only Like Markets with an initial market size of at least 1 pax and a positive pax development are considered to create the trend.¹⁾

3

Capacity-Adjusted Trend Curve (Blue Line)

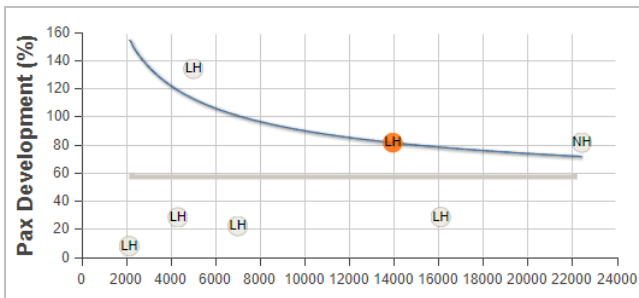
Besides the initial market size, the amount of capacity added is another important factor influencing the stimulation rate. An additional regression analysis is used to assess the correlation between capacity and pax development. The result is used to calibrate the trend curve to the level of additional capacity proposed in your scenario. Typically, if the proposed capacity of your new service is above the average capacity added at the Like Markets, the blue trend curve will be above the gray trend curve. However, this may differ depending on the initial market size. Usually capacity has a lower influence at large markets.

1) Negative values or 0 cannot be used in power functions.

Release Notes Version 3.5.0

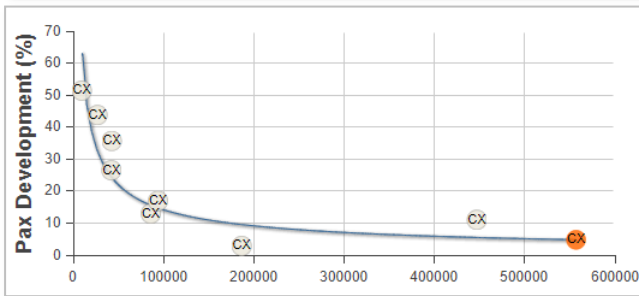
Stimulation Methodology Description (2/2)

In some scenarios, the Like Markets may not follow the typical patterns described on the previous page. Below you can find details on special constellations and hints how to interpret them.


1

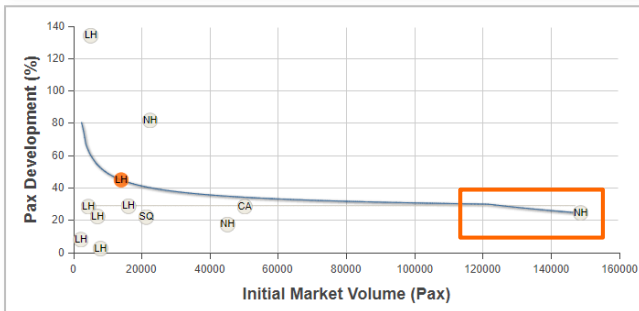
Special situation: No correlation between market size and pax development

It is expected that the pax growth rate decreases the higher the initial market size is. If for some reason the Like Markets do not show this pattern, the gray trend line pictures the average growth rate of the Like Markets, irrespective of the initial market size. Thus, the line is in parallel to the X-axis. Usually, the system will still suggest a meaningful growth rate for your scenario, as the calibrated trend curve (blue line) takes the relative capacity increase in consideration.


2

Special situation: No correlation between capacity and pax development

It is reasonable to assume that the introduction of services with higher seat capacity results into higher growth rates. However, in some cases at the Like Markets no correlation between capacity and growth rate can be found. If so, the trend curve will not be adjusted based on capacity. Thus, the blue curve is identical to the gray curve. The growth rate suggested by the system will always be the same irrespective of the frequency and capacity specified for your scenario.


3

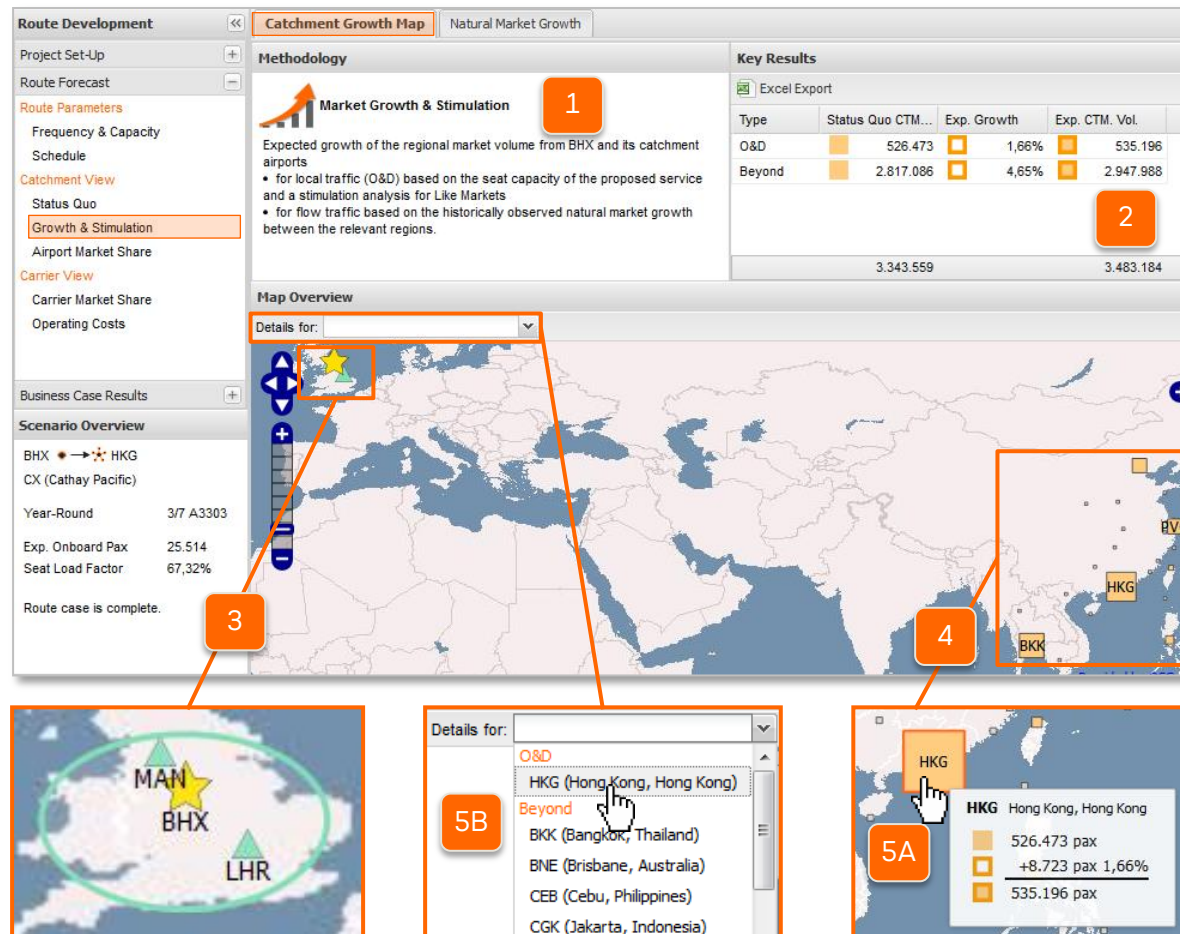
Special situation: Automated cap of stimulation rate

The validity of the trend curve is the highest for the range that most Like Markets are in, e. g. in the sample graph for an initial market size up to 50 000 Pax. If a trend line is used to project the growth rate for much larger or smaller markets, the projection is less reliable. To avoid that an overly high stimulation rate is suggested by the system, the growth rate is automatically capped if it would exceed the highest absolute passenger growth that has been observed at any Like Market. That means, only a growth rate that has been proven at the market will be suggested by the tool. Often the cap is visible as a sharp bend of the curve at the point where it would lead to overstimulation if no cap were made.

Release Notes Version 3.5.0

Using the Stimulation & Growth Section

This section provides an overview of the results of the market growth analysis for the point-to-point route and beyond destinations. The tool has automatically suggested results which you may verify and adjust.



- 1 Short description of the methodology
- 2 Summary of the main results
- 3 Visualization of the geographic location of your airport and catchment airports
- 4 Visualization of the geographic location of destination airports and market size. Move the mouse over a destination to view the status quo market volume and the expected growth of traffic from your catchment area to this destination.

To view the detailed calculation process of the expected growth for a destination and to perform individual adjustments:

- 5A Click on a destination in the map
or
- 5B Select a destination from the dropdown menu

Release Notes Version 3.5.0

Using the Stimulation & Growth Section: Step 1

After you have selected the point-to-point destination from the map, the detailed calculation path for the expected growth is displayed.

0 Process Steps

Click on one of the items for details.

1 Step 1: Like Market Selection

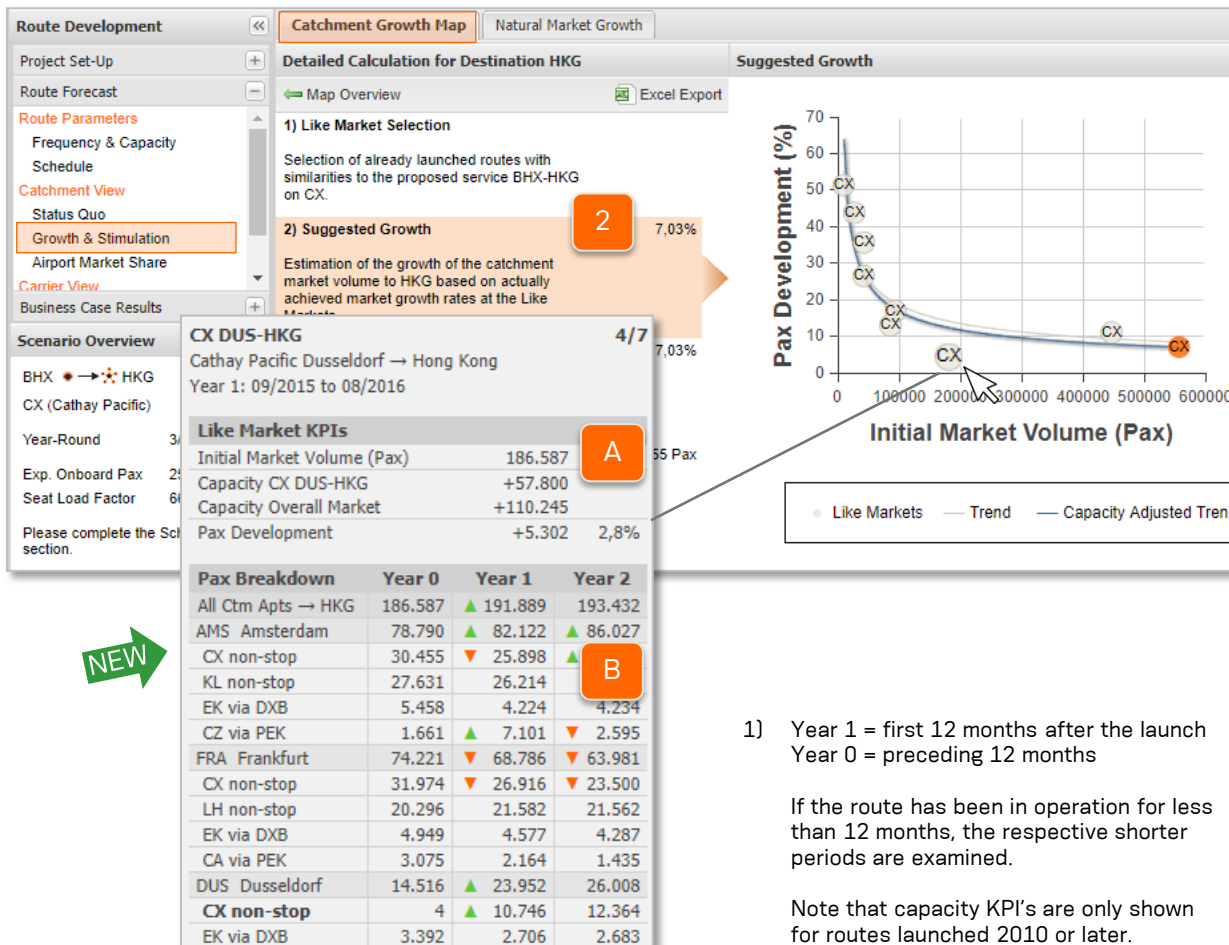
- View a list of launched routes that the system has identified.¹⁾
- For a better overview, the Like Markets are grouped. Each Like Market will only be displayed in the first applicable group, e. g. Cathay routes to HKG in "New Routes by Cathay Pacific", but not in "New Routes to HKG".
- Optional: Use the check boxes to select the most relevant Like Markets to be included into the trend analysis.²⁾

A Use the *Limit* drop down menu to examine more Like Markets if needed.

- For each Like Market, you can see how the pax volume has developed in the first 12 months after the launch. Note that this development is analyzed for the overall catchment area of the origin airport.
- By default, the 10 Like Markets with the highest similarity are activated, irrespective of the group. The similarity is calculated based on geographic location, carrier properties (legacy vs. LCC, alliance), market size and competition.

Release Notes Version 3.5.0

Using the Stimulation & Growth Section: Step 2



Release Notes Version 3.5.0

Using the Stimulation & Growth Section: Steps 3 to 5

Route Development | **Catchment Growth Map** | Natural Market Growth

Project Set-Up | Detailed Calculation for Destination HKG | Adjusted Growth for Traffic from the Catchment Area to HKG

Route Forecast | Map Overview | Excel Export

Route Parameters

- Frequency & Capacity
- Schedule

Catchment View

- Status Quo
- Growth & Stimulation**
- Airport Market Share

Carrier View

- Business Case Results

Scenario Overview

BHX → HKG

CX (Cathay Pacific)

Year-Round 3/7 A3302

Exp. Onboard Pax 25,209

Seat Load Factor 66,46%

Please complete the Schedule section.

1) Like Market Selection

Selection of already launched routes with similarities to the proposed service BHX-HKG on CX.

2) Suggested Growth 7,03%

Estimation of the growth of the catchment market volume to HKG based on actually achieved market growth rates at the Like Markets.

3) Adjusted Growth 7,03%

Optional: User specific adjustment of the market growth rate based on own judgement of the individual market properties.

4) Expected Catchment Market Volume 596.055 Pax

Calculation of the overall number of pax departing from my airport and the catchment airports, including non-stop and indirect traffic, irrespective of carrier.

Adjust

Suggested Growth Based on Like Markets: 7,03%

Adjusted Growth: 7,03%

Expected Catchment Market Volume: 596.055 Pax

Save

Calculation

Status Quo Catchment Market Volume:	556.927 Pax
Expected Growth (7,03%):	+ 39.128 Pax
Expected Catchment Market Volume:	596.055 Pax

3

Step 3: Adjusted Growth

Optional: Adjust the proposed market growth based on your own judgement.

The Like Market chart that you have seen in step 2 may give you hints on how to adjust the growth. For example, if the best matching Like Market is above the trend, this may indicate that you can adjust the expected growth rate up.

4

Step 4: Expected Catchment Market Volume

View the calculation of the expected market volume from your catchment area based on the previous steps.

5

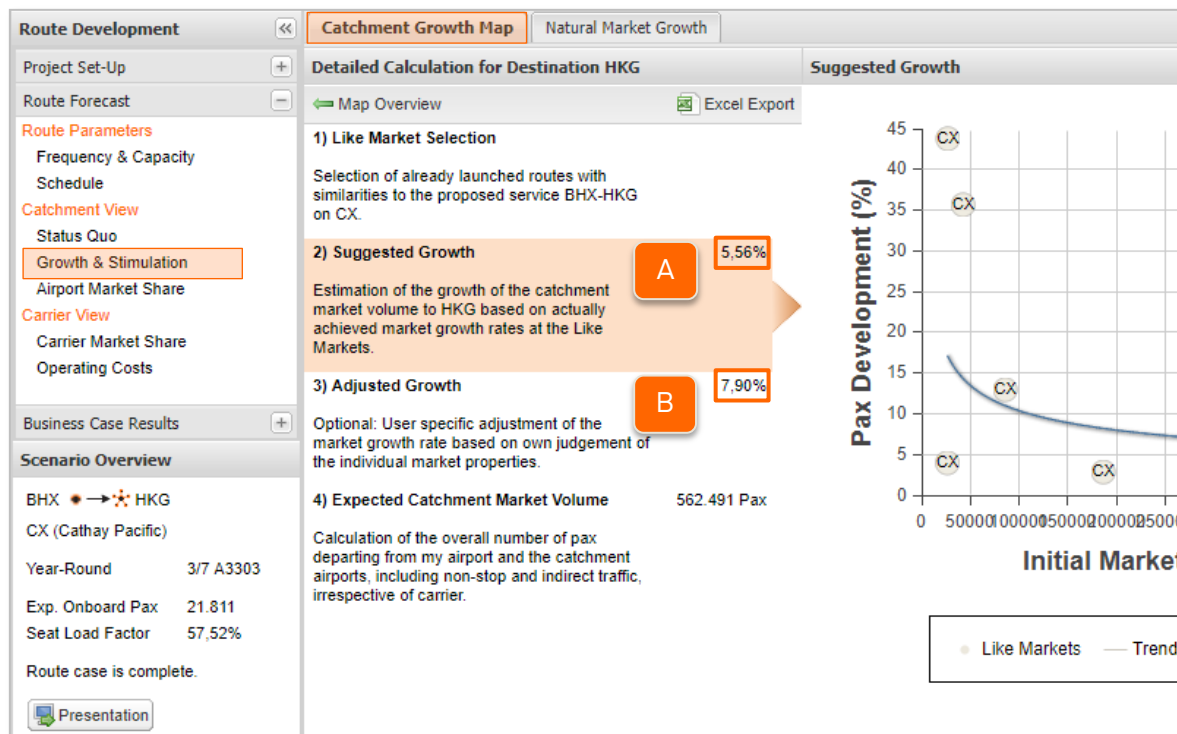
Return to Overview

Press the *Map Overview* button to get back to the map.

Release Notes Version 3.5.0

Notes on the Migration of Existing Projects

Due to the methodology improvement, the suggested growth rate may now be different than it has been with the algorithm of previous versions of B Route Development. Your existing forecast results have, however, remained unchanged, as the original growth rate has been kept as the *Adjusted Growth Rate*.



A

Suggested Growth (new algorithm)

The suggested growth rate is based on the new algorithm (even for existing projects!), meaning the new stimulation curves as described in this document are used.

B

Adjusted Growth (as per the creation time of the project)

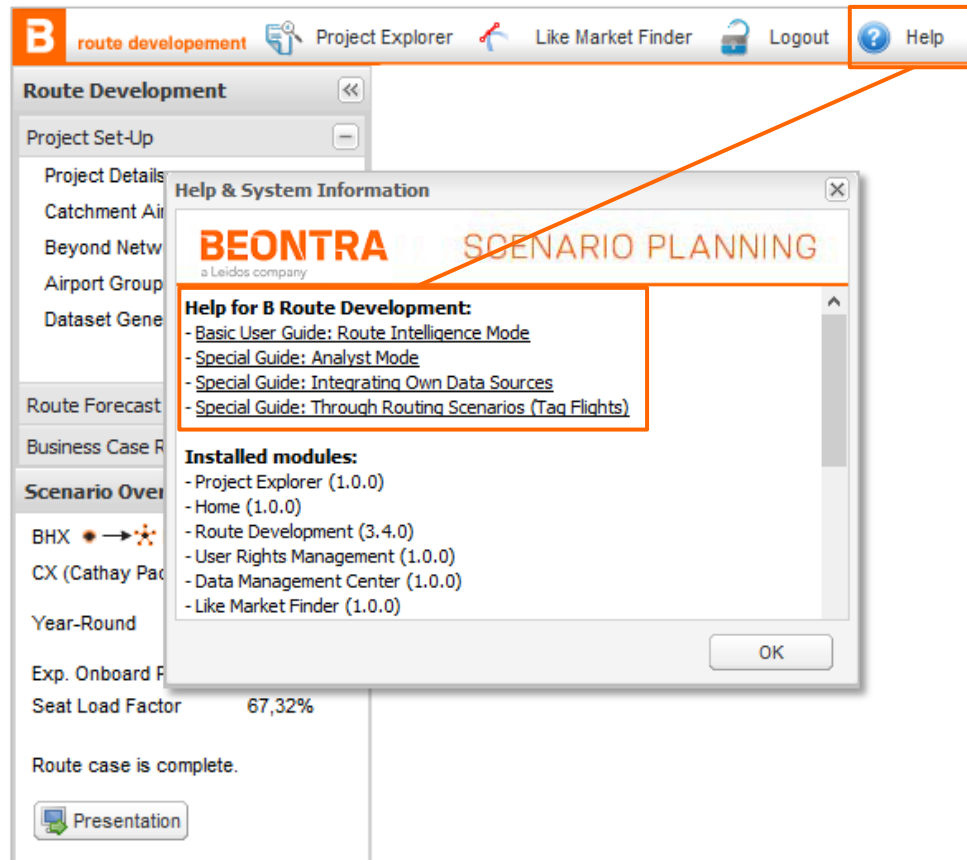
The adjusted growth rate has remained untouched with the update to the new B Route Development version, i. e. it is equal to the suggested growth rate at the time when the project has been created (or your individual value, in case you have overwritten the default).

The adjusted growth rate will be overwritten by the new suggested growth rate if you

- change frequency or capacity of the proposed service
- change the selection of Like Markets
- or recalculate the project.

Release Notes Version 3.5.0

Accessing the User Guide



- As with every release, the user guide has been updated to reflect the latest changes and feature additions.
- You can access the latest version of all user guides within B Route Development via the *Help* button.

Contact & Support

Any questions?

Contact our team via broutedevelopment@beontra.com

In case of technical problems

Contact support@beontra.com

Phone: +49 (0)700 - B HELPFUL or +49 (0)700 24 35 73 85