

**Eighteenth Meeting of the Cross Polar Trans East Air Traffic Management Providers' Work Group  
(CPWG/18)**

(Paris, France, 16-19 December 2014)

**Agenda Item 6: ATS Route Catalogue**

A Proposal for Some New Optimal Additional Connections for AMATI to SIMLI trajectory

(Presented by United Airlines)

SUMMARY

This working paper presents information for the Group's consideration about a proposal for some new optimal additional connections for AMATI to SIMLI trajectory.

**1. Introduction**

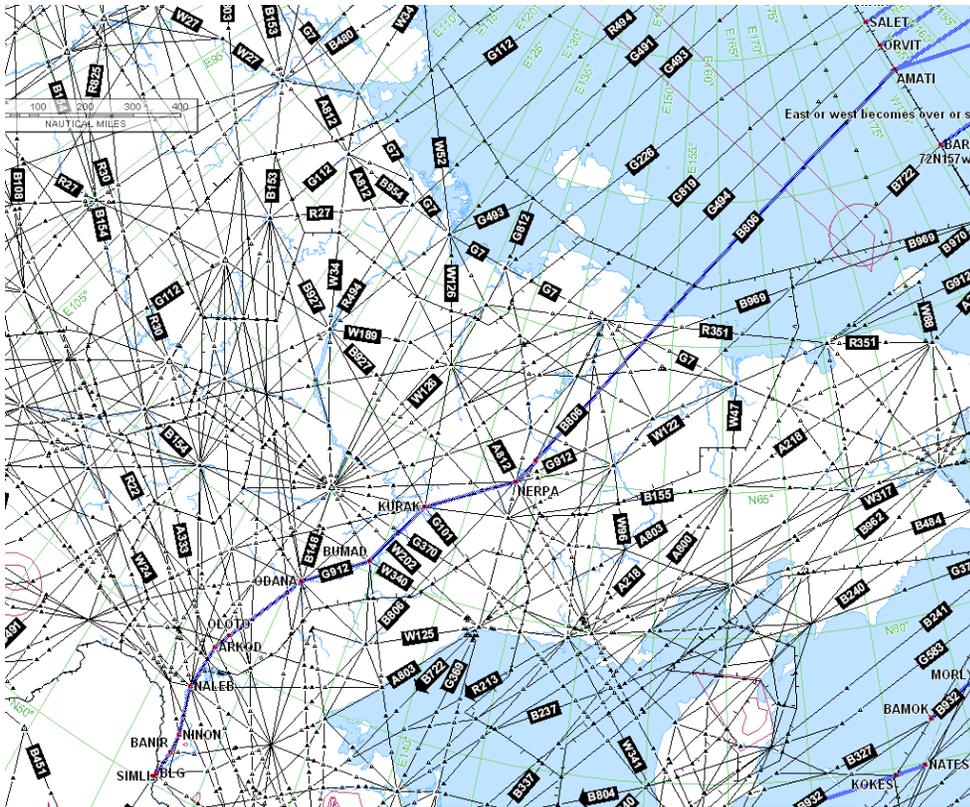
1.1 AMATI.B806.MAGIT is a valuable new sub Polar-Style route for all airlines to use. Current wind patterns dictate a need for additional connections for more options that the modern flight plan computers can utilize within the Russian Federations airspace.

1.2 Currently we have options from AMATI to SULOK (Russian/Mongolia border), AMATI to SIMLI (Russia/China border) via dogleg connections, AMATI to MAGIT (optimal) but it is one way at MAGIT for flights into China only.

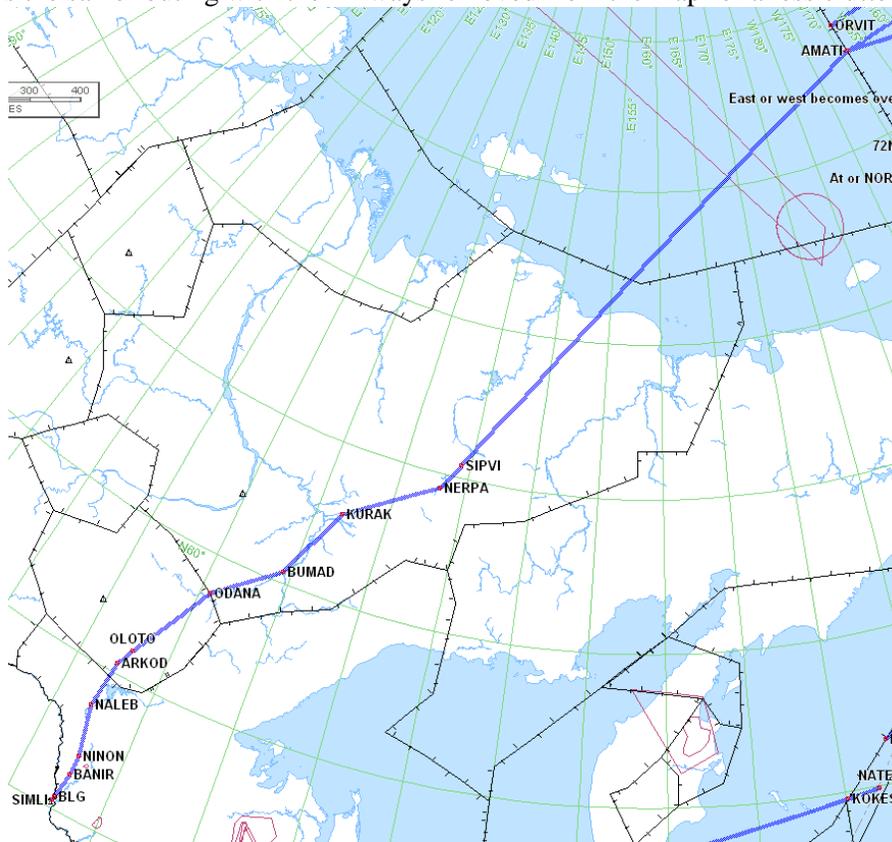
**2. Discussion**

2.1 A year-long study has shown a strong use of AMATI for Long Haul flights due to wind patterns in USA/Canada and within the Russian Federations border before entry into China at one of many locations.

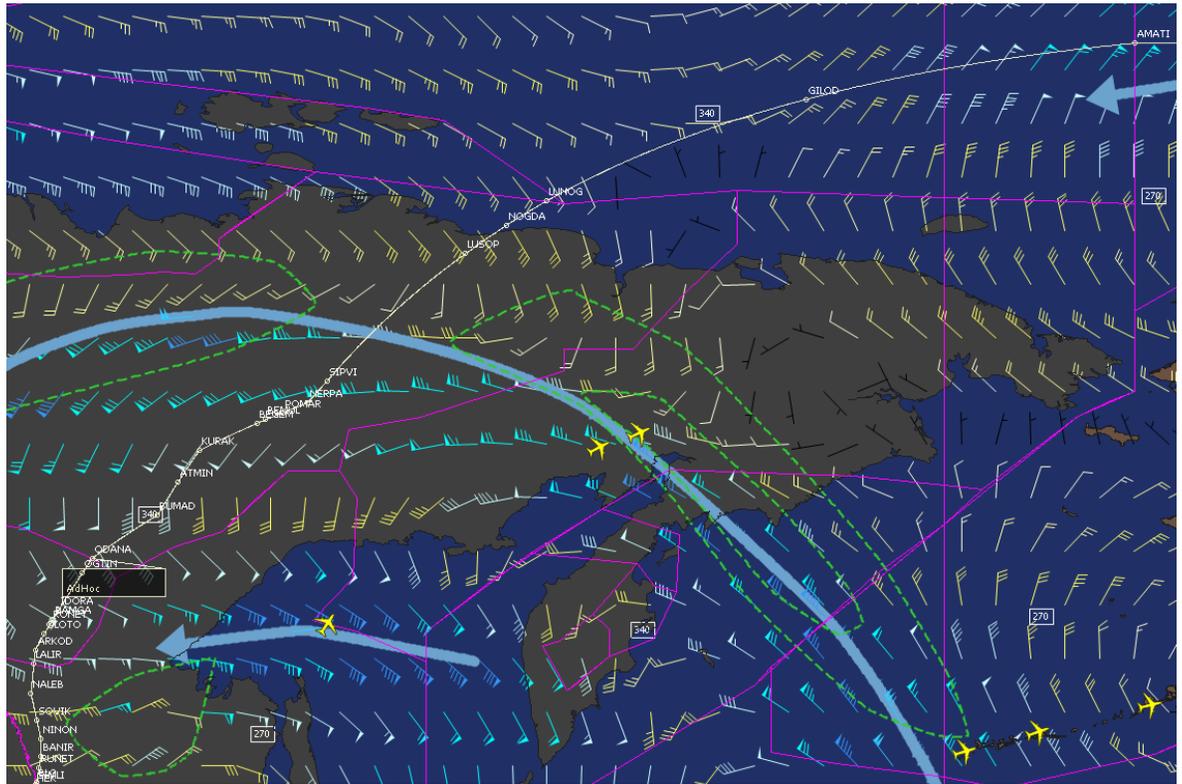
2.2 Below is a depiction of the present Great Circle route from AMATI to NERPA, then some of the existing connections used to plan via SIMLI when the continuation from SIMLI to destination favours this entry point in China.



2.3 Below is the same routing with the Airways removed from the map for a less cluttered picture.



- 2.4 Below is the same route as above with FL340 Wind Forecast Overlay of 02 December 2014 for guidance.



- 2.5 The Study suggests the following as a suggestion for Optimization of AMATI to SIMLI by the addition of the following connections/routing:

*NERPA dct NODRO dct MABUT dct AAAAA(crossing point on airway B153) dct intersection with Airway A801/B148 dct BBBB(crossing point on airway R30 dct intersection B152/A802 dct CCCCC (crossing point R22) dct DDDDD (crossing point on Airway B101) dct ODENA dct BUDES dct BANIR.*



**2.6 Average Potential Savings/Green Savings for Airlines per flight.**

1. Time saved – 7 minutes
2. Distance saved – 53Nm
3. Fuel saved – 2,690lbs
4. Emissions not produced – 8,339lbs

CUMULATIVE POTENTIAL SAVINGS from this one optimization is approximately 182 flights (UAL only statistics) for these past 12 months.

1. Potential Cumulative Time saved – 1,274 minutes
2. Potential Cumulative Distance saved – 9,646Nm
3. Potential Cumulative Fuel saved – 489,580lbs
4. Potential Cumulative Emissions not produced – 1,517,698lbs

**3. Action by the Meeting**

3.1 The meeting is invited to:

- a. review the information contained in this Working Paper;
- b. endorse the information provided in this Working paper with suggestions on how to move forward with implementation.