Pigeonhole Live

Q&A

Airspace Capacity

04 Jun 2025, 08:15 - 05 Jun 2025, 17:00

Participants

70

Interactions*

199

Questions

71

71 allowed | 0 pending

0 dismissed | 0 archived

Votes

78

14 Highest vote

Answered questions

54

0 answer ratings

0/5 average rating

* Interactions include the total number of questions, votes, comments and answer ratings

71 Questions Allowed

14 VOTES

Anonymous • 04 Jun 2025 09:10 • ✓ ANSWERED

ATCO workload and acceptance rate may differs based on their experiences, capabilities and skills. Which level of ATCO capabilities (average?) should be considered for calculating the capacity

1 Comment:

Vern Payne • Allowed on 04 Jun 2025, 10:19 • Allowed

Most capacity determination models assume an average controller experience/expertise for the baseline capacity. Then on the day of operation, communication between FMU and ATCO supervisors determine the mitigations and that takes into account the current controller experience as the supervisor knows his/hers people.

1 Upvote | 0 Downvotes

5
VOTES

Anonymous • 04 Jun 2025 09:17 • ✓ ANSWERED

[FAA]are there instances where enroute sectors will be combined due to various reasons? How then will the airspace capacity for the combined sector be calculated?

1 Comment:

Vern Payne • Allowed on 04 Jun 2025, 14:11 • Allowed

Enroute sectors are combined during periods of low volume, as demand grows, sectors are de-combined, until all appropriate sectors are open. The FAA models are calculated for all of the common sector combinations and that value is used during those corresponding sectors configurations.

0 Upvotes | 0 Downvotes

5
VOTES

Anonymous • 04 Jun 2025 09:29 • ✓ ANSWERED

[FAA]What is the benefit of splitting the airspace vertically over the conventional sectorisation ? (Edited)

1 Comment:

Vern Payne • Allowed on 04 Jun 2025, 13:26 • Allowed

Increasing capacity (via reduced controller workload) without sacrificing flexibility for aircraft to deviate around weather.

0 Upvotes | 0 Downvotes

5
VOTES

Anonymous • 04 Jun 2025 09:41 • ✓ ANSWERED

Where did the assumptions for the FAA Methodology come from? e.g. 36 seconds of work time per aircraft

1 Comment:

Vern Payne • Allowed on 04 Jun 2025, 10:50 • Allowed

In the early version, using the Time In Sector model, it came from observers sitting behind the ATCOs with stop watches.

0 Upvotes | 0 Downvotes

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4 VOTES

Anonymous • 04 Jun 2025 09:06 • ✓ ANSWERED

[FAA] how human factor can be included quantitatively into the mathematical workload calculation?

1 Comment:

Vern Payne • Allowed on 04 Jun 2025, 13:19 • Allowed

Some of the capacity models (Controller Workload) include human factors, other models need human expertise to adjust for human factors

0 Upvotes | 0 Downvotes

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4 VOTES

Anonymous • 04 Jun 2025 09:36 • ✓ ANSWERED

How does FRA affect the capacity assessment as it complicates the routing pattern ?

1 Comment:

Vern Payne • Allowed on 04 Jun 2025, 14:18 • Allowed

FRA/UPRs can change controller workload as normal conflict points can move, coordination may need to be increased. If implementing FRA/UPRs, be conservative on capacity while experience is gained, then reevaluate and adjust as new patterns become the new normal.

0 Upvotes | 0 Downvotes

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4 VOTES

Anonymous • 04 Jun 2025 09:51 • ✓ ANSWERED

Faa. Can you speak a little on tma capacity determination?

1 Comment:

Vern Payne • Allowed on 04 Jun 2025, 10:38 • Allowed

In the FAA experience, the Workload Based model applies to both enroute and TMA sectors. The types of operations naturally change from enroute to TMA, but the formula still works.

0 Upvotes | 0 Downvotes

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3 VOTES

Anonymous • 04 Jun 2025 15:34 • ✓ ANSWERED ★

[ECTL] Do ECTL have KPI for OTP? How do you balance OTP against ATFM delays?

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3 VOTES

Anonymous • 04 Jun 2025 15:50 • ✓ ANSWERED

to Rafaele : could you explain in detail and example for action to increase airspace capacity in terms of opening schemes?

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2 VOTES

Anonymous • 04 Jun 2025 09:11 • ✓ ANSWERED

(faa) For the simple methodology. Can you multiple the figure by 4 to get an hourly capacity?

1 Comment:

Vern Payne • Allowed on 04 Jun 2025, 13:27 • Allowed

Yes

0 Upvotes | 0 Downvotes

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2 VOTES

Anonymous • 04 Jun 2025 09:29 • ✓ ANSWERED

[FAA] Can you give us a few examples of "automation" which are already applied or can be applied in Enroute environment for reducing the workload of the ATCOs? (Edited)

1 Comment:

Vern Payne • Allowed on 04 Jun 2025, 14:06 • Allowed

AIDC with adjacent FIRs, CPDLC, short range and intermediate conflict detection in the ATC system, airspace alerts in the ATC system.

0 Upvotes | 0 Downvotes

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2 VOTES

Anonymous • 04 Jun 2025 09:35 • ✓ ANSWERED

Does FAA conduct the review of airspace capacity every time there is changes to the ATC procedures, airspace structures and/or ATM systems (Edited)

1 Comment:

Vern Payne • Allowed on 04 Jun 2025, 14:16 • Allowed

Yes, significant changes to airspace design, procedures or new capabilities all drive re-evaluation of declared capacity, sometimes they need to be estimates until enough data has been gathered to refine the models.

0 Upvotes | 0 Downvotes

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2 VOTES

Anonymous • 04 Jun 2025 13:42 • ✓ ANSWERED

[EC] how the 70% of workload factor is determined? Brazil and Saudi use 60%, FAA use 90%

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2 VOTES

Anonymous • 04 Jun 2025 15:51 • ✓ ANSWERED

For dynamic resectorisation, how do you calculate the capacity?

1 Comment:

Raffaele Russo • Allowed on 04 Jun 2025, 16:45 • Allowed

There are different approaches, through CAPAN or Capacity planning methods

0 Upvotes | 0 Downvotes

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2 VOTES

Anonymous • 04 Jun 2025 15:54 • ✓ ANSWERED

Sectorization enhances capacity but at the same time increases frequency for controller to coordinate with neighboring sector, how eurocontrol balances such dilemma

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2 VOTES

Anonymous • 04 Jun 2025 16:02 • ✓ ANSWERED ★

How do you determine that new sector(s) need to be established rather than managing traffic using ATFM (Edited)

1 Comment:

Vern Payne • Allowed on 04 Jun 2025, 16:16 • Allowed

From an FAA perspective, monitoring persistent situations where demand reaches or exceeds capacity, triggers an analysis of the airspace looking for the best solution to increase capacity through airspace redesign.

1 Upvote | 0 Downvotes

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1 VOTE

Anonymous • 04 Jun 2025 09:17 • ✓ ANSWERED

how the 90% of workload threshold is decided?

1 Comment:

Vern Payne • Allowed on 04 Jun 2025, 14:12 • Allowed

Statistical analysis of types of operation along with sophistication of automation systems.

0 Upvotes | 0 Downvotes

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1 VOTE

Anonymous • 04 Jun 2025 09:23 • ✓ ANSWERED

Why FAA consider 90% workload factor appropriate while most other model use 60%?

1 Comment:

Vern Payne • Allowed on 04 Jun 2025, 14:08 • Allowed

Increased automation assists in lowering non-separation duties, so the more that automation is capable of flight plan coordination, communication changes, etc, the more time the controller has to do conflict resolution (separation of aircraft). FAA has highly automated ATC systems that relieve the ATCO of other duties.

0 Upvotes | 0 Downvotes

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1 VOTE

Anonymous • 04 Jun 2025 09:37 • ✓ ANSWERED

Mr Vern, how do you plan/deploy controllers for dynamic sector?

1 Comment:

Vern Payne • Allowed on 04 Jun 2025, 14:04 • Allowed

We staff to normal traffic. If the normal traffic pattern has all sectors open during peak traffic, that is the number of ATCOs needed for that shift (with a reserve for breaks/training/other duties). This will provide the ability to open all available sectors when demand dictates.

0 Upvotes | 0 Downvotes

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1 VOTE

Anonymous • 04 Jun 2025 09:39 • ✓ ANSWERED

[FAA] presented studies/simulations based on en-route airspaces, were there studies/simulations based on terminal airspaces? If so, what are the significant differences and challenges encountered? (Edited)

1 Comment:

Vern Payne • Allowed on 04 Jun 2025, 10:51 • Allowed

The workload based model applies to both, just the number of flights in the different categories differs.

0 Upvotes | 0 Downvotes

1
VOTE

Anonymous • 04 Jun 2025 09:57 • ✓ ANSWERED

Mr. Vern, from a methodological perspective, from your experience have you determined whether subjective or objective measures are more effective in defining controller workload?

1 Comment:

Vern Payne • Allowed on 04 Jun 2025, 10:36 • Allowed

In my experience, you start with the objective and then refine with the subjective

0 Upvotes | 0 Downvotes

1
VOTE

Anonymous • 04 Jun 2025 10:03 • ✓ ANSWERED

To VERN, besides traffic what factor should be taking into consideration in setting a sector even sector capacity

1 Comment:

Vern Payne • Allowed on 04 Jun 2025, 10:35 • Allowed

Depends on the model being used to establish sector capacity. Most model take into account controller workload (beyond just traffic count). The simplistic time in sector model can be a good starting point, but must include ATCO input to make sure the other factors are taken into account.

1 Upvote | 0 Downvotes

1
VOTE

Anonymous • 04 Jun 2025 11:01 • ✓ ANSWERED

Does FAA has the capacity evaluated on seasonal basis to cater for weather changes?

1 Comment:

Vern Payne • Allowed on 04 Jun 2025, 13:56 • Allowed

Declared capacity, no, but operational capacity, yes.

0 Upvotes | 0 Downvotes

1
VOTE

Anonymous • 04 Jun 2025 11:03 • ✓ ANSWERED

[FAA] What is the significance of evaluation abnormal circumstances? As these occurrences pose different impact to capacity differently (Edited)

1 Comment:

Vern Payne • Allowed on 04 Jun 2025, 13:53 • Allowed

Any circumstance that prevents normal operations (sector de-combining, frequency congestion, CNS or Automation issues) should drive operational capacity reduction during the duration of the event. Each event is different and coordination with ATCOs and technicians to fully understand the impacts is essential to adjusting the operational capacity correctly.

0 Upvotes | 0 Downvotes

1
VOTE

Anonymous • 04 Jun 2025 11:11 • ✓ ANSWERED

[FAA] Based on experience, is there any changes in the airspace capacity if FRA is implemented vs ATS routes?

1 Comment:

Vern Payne • Allowed on 04 Jun 2025, 13:48 • Allowed

FRA can change ATCO workload, so on the implementation of FRA, I would be conservative with changes in capacity. As experience is gained, capacity can be adjusted upward.

0 Upvotes | 0 Downvotes

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1 VOTE

Anonymous • 04 Jun 2025 11:16 • ✓ANSWERED

[FAA] based on your assessment, how accurate is the MET forecast. in Southeast Asia due to tropics weather, it is very unpredictable which causes the capacity to drop beyond the previously anticipated

1 Comment:

Vern Payne • Allowed on 04 Jun 2025, 13:45 • Allowed

Depends on the type of weather/forecast. Winter weather and Frontal Passage events are very predictable. Air Mass thunderstorms are generally predictable, but details of timing and location are less predictable. Cyclonic systems are predictable in short term forecasts, while longer term forecasts are less predictable. Weather forecasting is improving as technology improves, not all weather types can have accurate forecasts, but it is getting better slowly but surely

0 Upvotes | 0 Downvotes

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1 VOTE

IFATCA Malaysia • 04 Jun 2025 11:24 • ✓ANSWERED

How do you manage cross-sector collaboration when two adjacent sectors have unbalanced demand especially with different staffing or traffic loads? (Edited)

1 Comment:

Vern Payne • Allowed on 04 Jun 2025, 13:39 • Allowed

Cross sector collaboration within an ANSP should be straightforward, Cross ANSP requires more coordination. Primarily managed via the automation tools in the ATFM system, but can also be verbal coordination if required.

0 Upvotes | 0 Downvotes

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1 VOTE

Anonymous • 04 Jun 2025 11:46 • ✓ANSWERED

What would be the suggestions in finding capacity for a centre with least related technological background which has not conducted any analysis before.

1 Comment:

Vern Payne • Allowed on 04 Jun 2025, 13:34 • Allowed

I would start with the simplest model, the average time in sector model, then the ANSP/State can evolve to more sophisticated models as needed

0 Upvotes | 0 Downvotes

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1 VOTE

Anonymous • 04 Jun 2025 13:50 • ✓ ANSWERED

when controller reach 70% of workload then what action taken in regards of sector capacity

1 VOTE

Anonymous • 04 Jun 2025 13:52 • ✓ ANSWERED

how did you define workload factor and how did you state the dependency between workload and sector traffic rates

1 VOTE

Anonymous • 04 Jun 2025 14:32

[Mr Raffaele] On the graph plotting workload against sector entry count, did FTS results always generate an exponential curve? Did it ever generate just an upward linear line?

1 VOTE

Anonymous • 04 Jun 2025 15:34 • ✓ ANSWERED

(ECTL) how are your environment and capacity targets projected YoY from 2024 to 2029?

1 Comment:

Raffaele Russo • Allowed on 04 Jun 2025, 16:49 • Allowed

European regulation sets the European network targets which are broken down at ANSP and ACC level

0 Upvotes | 0 Downvotes

1 VOTE

Anonymous • 04 Jun 2025 16:25 • ✓ ANSWERED

[ectl] for network traffic distribution measures, the re-routing will incur longer flying distance? Does the benefits outweighs the cost incurred by the airlines and extra fuel burn?

1 Comment:

Raffaele Russo • Allowed on 04 Jun 2025, 16:46 • Allowed

The measures are devised to try to limit the route length extension or to outweigh the additional cost

0 Upvotes | 0 Downvotes

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VOTES

Anonymous • 04 Jun 2025 09:09 • ✓ANSWERED

[FAA/EUROCONTROL] What would be the optimum ratio to evaluate capacity/workload between fast time Sim and real time Sim? (Edited)

1 Comment:

Vern Payne • Allowed on 04 Jun 2025, 14:13 • Allowed

I defer to EuroControl who are the experts on Fast Time/Real Time simulations

0 Upvotes | 0 Downvotes

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VOTES

Anonymous • 04 Jun 2025 09:34 • ✓ANSWERED

How "dynamic" is the opening and closing of additional sectors in the US? Is it decided tactically (on the day of, or in the coming hours) or pre-tactically (day or week leading up to the ops day)?

1 Comment:

Vern Payne • Allowed on 04 Jun 2025, 14:14 • Allowed

Our TMA and Enroute Sectors all have displays from the ATFM system which predicts demand out to 4 hours in the future. That prediction is used to guide the opening and closing of sectors.

0 Upvotes | 0 Downvotes

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VOTES

Anonymous • 04 Jun 2025 09:42 • ✓ANSWERED

Can you explain what are the main differences between FAA's Methodology and Brazilian's/Saudi Arabia's methodology?

1 Comment:

Vern Payne • Allowed on 04 Jun 2025, 10:49 • Allowed

Different elements are considered and the percentage of controller time dedicated to active separation tasks are different. Levels of automation primarily drive the differences.

0 Upvotes | 0 Downvotes

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VOTES

Anonymous • 04 Jun 2025 09:49 • ✓ANSWERED

Mr. Vern, for terminal control area airspace capacity computation, do you take into consideration the capacity of the airport it provide service for?

3 Comments:

Vern Payne • Allowed on 04 Jun 2025, 14:02 • Allowed

You could do that, but in reality, your ATFM tools will be used to meet the capacity of the lowest capacity element, which in your example will be the airport. Solve for the airport, and the airspace demand will not approach capacity, no need to adjust airspace capacity. Capacity is the benchmark to measure demand against. If demand does not approach capacity, not need to take any action.

0 Upvotes | 0 Downvotes

Anonymous • Allowed on 04 Jun 2025, 10:59 • Allowed

For clarification Mr. Vern, we can have a higher strategic airspace capacity (TMA) than the airport capacity, then we will just adjust the operational capacity in respect to the limitations of the airport.

0 Upvotes | 0 Downvotes

Vern Payne • Allowed on 04 Jun 2025, 10:39 • Allowed

Situational, some TMAs provide approach service to multiple airports, others to just a single airport. In rare situations, the airport capacity is less than the sector capacity and in those cases, the number is adjusted to the most constrained element.

1 Upvote | 0 Downvotes

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VOTES

Anonymous • 04 Jun 2025 10:00 • ✓ANSWERED

[FAA]with dynamic resectorization, does the FMU face issues with accurately implementing AFP due to the different parameters used in dynamic resectorization? E.g mismatch of airspace volume

1 Comment:

Vern Payne • Allowed on 04 Jun 2025, 10:36 • Allowed

No, AFPs spread across multiple sectors, sometimes multiple FIRs, a different methodology is used to determine AFP rates

0 Upvotes | 0 Downvotes

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VOTES

Anonymous • 04 Jun 2025 10:05 • ✓ ANSWERED

Does FAA link up the airspace capacity (both en-route and TMA) with airport capacity to determine an overall integrated capacity value of the system? If so, how is this being done?

1 Comment:

Vern Payne • Allowed on 04 Jun 2025, 10:26 • Allowed

We do not due to the size and complexity of the airspace system, however, if a state/ANSP has a need to do it, it can be done.

0 Upvotes | 0 Downvotes

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VOTES

Anonymous • 04 Jun 2025 10:06 • ✓ ANSWERED

[FAA] When splitting sectors vertically, does it involve a lot of coordination between both sectors while aircraft request climb from lower sector to upper sector ? (Edited)

4 Comments:

Anonymous • Allowed on 04 Jun 2025, 11:14 • Allowed

Many thanks for your answers !

0 Upvotes | 0 Downvotes

Cheryl IFATCA • Allowed on 04 Jun 2025, 10:50 • Allowed

We also did vertial splitting of the sector in my control center, and it is a great way to reduce ATC workload. We sperated the sector at FL290, because above that, most traffic are overflying the sector, and the coordination for climb/secent coordination is most of the time below FL290. First, It allows ATCOs working for lower sectors more time and brain capacity to managing the crossing traffic without being interruopted by the check-in from the overflights, and knowing that they only need to cilmb the flight to FL290 has reduced their workload A LOT already. Second, it reduce the total amount of traffic in one sector, which also help reduce the workoad of the ATCOs,

2 Upvotes | 0 Downvotes

Vern Payne • Allowed on 04 Jun 2025, 10:25 • Allowed

When the sectors are being de-combined, the current controller briefs the opening sector on the traffic in their sector, switches the aircraft in the opening sectors airspace to the frequency of the opening sector, hands off the aircraft (via the ATC system) to the opening sector and the process is competed.

0 Upvotes | 0 Downvotes

Vern Payne • Allowed on 04 Jun 2025, 10:23 • Allowed

No, the ATC automation system takes care of it, the controller in the lower sector enters the new requested altitude in the flight plan, climbs the aircraft to the top of their sector, initiates an automated hand off to the higher sector, when the higher sector can accept the aircraft, they accept the handoff, communication is transferred and the high sector climbs the aircraft out of the lower sector airspace

0 Upvotes | 0 Downvotes

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VOTES

Anonymous • 04 Jun 2025 10:16 • ✓ ANSWERED

[FAA] Is there a typical number of simulations that need to be conducted to determine the capacity value robustly? (Edited)

1 Comment:

Vern Payne • Allowed on 04 Jun 2025, 10:21 • Allowed

The FAA Controller Workload Model uses 365 days of data, so there is not a need to run multiple simulations. Other model that use Fast Time Simulations or Real Time Simulations use multiple iterations of simulations

1 Upvote | 0 Downvotes

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VOTES

Anonymous • 04 Jun 2025 10:56 • ✓ ANSWERED

[FAA] What would be the baseline data that required for a relatively comprehensive capacity assessment ?

1 Comment:

Vern Payne • Allowed on 04 Jun 2025, 13:58 • Allowed

The data needed varies by the model used. The more sophisticated the model, the more data is needed. The simplest model only requires the average duration of a flight in a sector, other models can require a lot of data.

0 Upvotes | 0 Downvotes

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VOTES

Anonymous • 04 Jun 2025 11:03 • ✓ ANSWERED

[FAA] In the case study of ZME, how is the permeability of weather cell being determined, does it count as part of the element in the formula to determine sector capacity?

1 Comment:

Vern Payne • Allowed on 04 Jun 2025, 13:55 • Allowed

The permeability of the storms plays a key role in the operational capacity reduction. It is normally a detailed discussion with aviation meteorologist to understand how much of a reduction is appropriate.

0 Upvotes | 0 Downvotes

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VOTES

Anonymous • 04 Jun 2025 11:07 • ✓ ANSWERED

[FAA] What is the relationship between FAA and the airlines when you mentioned about "self-help" from the efficiency tool box (Edited)

1 Comment:

Vern Payne • Allowed on 04 Jun 2025, 13:49 • Allowed

In a CDM environment, the ANSP provides transparent demand data, and airspace users can use that to help solve the problem. The example shown was arrival fix loading, and how some airlines can choose to go to a lesser used arrival fix without much time or fuel cost. They just need to see the data so they can coordinate with their dispatchers.

0 Upvotes | 0 Downvotes

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VOTES

Anonymous • 04 Jun 2025 11:16 • ✓ ANSWERED

Mr. Vern. Does the airspace capacity computation for a TMA include all flights (VFR and IFR) regardless of the difference in the type of service being provided?

1 Comment:

Vern Payne • Allowed on 04 Jun 2025, 13:46 • Allowed

If the ATCO must provide services (Class C airspace), then yes, VFR traffic should be included in the capacity determination.

0 Upvotes | 0 Downvotes

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VOTES

Anonymous • 04 Jun 2025 11:20 • ✓ ANSWERED

Can you explain the roles of the Flow Management Unit (FMU) and Air Traffic Control Officers (ATCOs) at ACCs, APPs, TWRs in assessing and determining airport and airspace capacity?

1 Comment:

Vern Payne • Allowed on 04 Jun 2025, 13:42 • Allowed

Establishing strategic (declared) capacity is a periodic event (annual, seasonal, etc). Operational capacity is adjusted to real world events (weather, equipment outages, staffing). FMUs, ATCOs, Supervisors are all involved in managing the demand when it approaches or exceeds capacity.

0 Upvotes | 0 Downvotes

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0 VOTES

Kalusi Raloka • 04 Jun 2025 11:34 • ✓ANSWERED

Does jetstream play a role on determining capacity and optimum level planning.

1 Comment:

Vern Payne • Allowed on 04 Jun 2025, 13:37 • Allowed

Not to determine capacity, but it certainly impacts the demand. Capacity does not change with demand, but can change with weather, equipment outages, staffing etc. Demand needs to be managed when it gets close to or exceed capacity

0 Upvotes | 0 Downvotes

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0 VOTES

Anonymous • 04 Jun 2025 11:44 • ✓ANSWERED

do the capacities represent occupancy within a period (snapshot) or based on entry count within a period?

1 Comment:

Vern Payne • Allowed on 04 Jun 2025, 13:36 • Allowed

It can be either. Up to the State/ANSP. Large sectors work better with peak aircraft in a sector during the period, smaller sectors work well with entry count.

0 Upvotes | 0 Downvotes

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0 VOTES

Anonymous • 04 Jun 2025 13:46 • ✓ANSWERED

In RCAPAN, what sort of actions contribute to working time ? Does controllers thinking time included ? Does hear-back considered working ?

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0 VOTES

Anonymous • 04 Jun 2025 13:51 • ✓ANSWERED

[EUROCONTROL] What would be the optimum ratio to evaluate capacity/workload between fast time Sim and real time Sim?

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0 VOTES

Anonymous • 04 Jun 2025 13:53 • ✓ANSWERED

To eurocontrol. can you please explain further the difference between a task load and a workload.

---

0 VOTES

Anonymous • 04 Jun 2025 14:02

How is RCAPAN different from TAAM ?

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0 VOTES

Anonymous • 04 Jun 2025 14:06

Since guidance from ICAO is not yet available, what significant role will state regulators take in the initial establishment of airspace capacity?

[What guidance are you referring to ?] (Edited)

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0 VOTES

Anonymous • 04 Jun 2025 14:08

Do you also conduct real-time simulation (RTS) In your view, which situations require RTS?

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0 VOTES

Anonymous • 04 Jun 2025 14:15

In your experience, were regulations established before determining airspace capacity or formulation of regulations was a result of the different airspace capacity models outputs? Any example? (Edited)

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0 VOTES

Anonymous • 04 Jun 2025 14:18

(CAPAN) How would CAPAN simulate workload of controller in TMA sector where traffic pattern could be dynamically changing all the time, e.g. holding, direct track etc.

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0 VOTES

Anonymous • 04 Jun 2025 14:19

Mr Vern and Mr Russo, has there been any comparison made on the assessment using the FAA time sector method and CAPAN method ?

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0 VOTES

Anonymous • 04 Jun 2025 14:24

EC. How long does the whole capacity assessment process take?

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0 VOTES

Anonymous • 04 Jun 2025 14:25

(CAPAN) Would CAPAN work out different traffic scenarios during the simulations? Will it take the most complicated one or “average out” the scenario complexity to calculate the capacity?

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0 VOTES

Anonymous • 04 Jun 2025 14:26

(CAPAN) Why extra Data Preparation stage is required for TMA?

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0 VOTES

Anonymous • 04 Jun 2025 14:26

(EC) how frequently is the capacity assessment done?

0 VOTES

Anonymous • 04 Jun 2025 14:35

how does Eurocontrol define and measure traffic complexity; what sort of model is being used?

0 VOTES

Anonymous • 04 Jun 2025 14:40

In your experience, what are the early warning indicators that a sector is reaching critical overload? And what are the recommended mitigation steps?

0 VOTES

Anonymous • 04 Jun 2025 14:48

[EC] What are the events that are generated by the fast time simulation? How did you come up with the 5 categories? How do you attach a number / workload value to each task/event?

0 VOTES

Anonymous • 04 Jun 2025 14:51

[EC] Why did you choose to use sector entry instead of occupancy counts within sector in your regression analysis?

0 VOTES

Anonymous • 04 Jun 2025 14:51

Does FRTO implementation changing airspace capacity?

0 VOTES

Anonymous • 04 Jun 2025 14:56

does eurocontrol perform validation using historical data? If so, what sort of evaluation/validation metrics are being used and what is considered to be "accurate" in this context?

0
VOTES

Anonymous • 04 Jun 2025 15:34 • ✓ ANSWERED

(Eurocontrol) Could you elaborate more on what is Airport delay vs ATFM delay?

1 Comment:

Raffaele Russo • Allowed on 04 Jun 2025, 16:50 • Allowed

ATFM delay refers to the delay generated by ATFM measures and it can be both airport and en-route related. Airport delay overall can be due to many factors, including ATFM delay

0 Upvotes | 0 Downvotes

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VOTES

Anonymous • 04 Jun 2025 15:58 • ✓ ANSWERED

Can the reliability of the ATC automation or equipment (lack of back up facility) be considered in airspace capacity computation? like maybe a percentage of the workload factor?

1 Comment:

Vern Payne • Allowed on 04 Jun 2025, 16:20 • Allowed

If ATC automation reliability is a common issue, happening repeatedly and frequently, then it could be a factor in capacity. From an FAA perspective, it would not be considered for declared capacity, but when problems occur, it would reduce operational capacity and measure would be implemented to manage the demand.

0 Upvotes | 0 Downvotes

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VOTES

Anonymous • 04 Jun 2025 16:12 • ✓ ANSWERED

(Capacity Delivery) How is the en-route delay being measured?

1 Comment:

Raffaele Russo • Allowed on 04 Jun 2025, 16:55 • Allowed

In Europe, en-route delay is measured as minutes of delay generated by the application of an airspace restriction. The latter results in slots aircraft have to comply with in order to take-off. For example, an aircraft could get a slot which delays its take-off by 15 minutes. It spends this time at the gate and at the end takes-off 15 minutes later than planned. The result is an ATFM delay of 15 minutes for that flight. This delay is attributed to the airspace for which the restriction was active and resulted in the slot for that aircraft.

0 Upvotes | 0 Downvotes

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VOTES

Anonymous • 04 Jun 2025 16:38 • ✓ ANSWERED

In increasing airspace capacity you have mentioned sectorization. In your setting, which is more beneficial, lateral or vertical sectorization?

1 Comment:

Raffaele Russo • Allowed on 04 Jun 2025, 16:56 • Allowed

Both. However, it really depends on the flows which dealt with

0 Upvotes | 0 Downvotes