

DAY TWO - CDM@DSNA OPERATIONAL WORKING SESSION

The Operational Working Session is a periodic event where DSNA FMPs and members from airspace department of Directorate of Operations of DSNA invite airliners to debate about some technical, ATFCM and/or specific points (about 40 pers.).



See list of Participants <u>here.</u>

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OPENING ADDRESS

René Feillet – DSNA - Head of Airspace Department

René Feillet welcomes participants to the OWS Day, held following the DSNA seminar. The different session's presentations will be intentionally short, so as to leave adequate time for Q&A, idea sharing and gathering of any points for further investigation, should the answers not be immediately available.

COLLABORATIVE PERFORMANCE REVIEW

ATFCM analysis on summer 2019

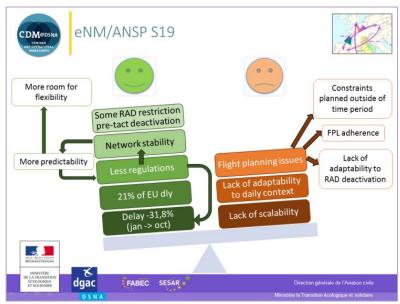
Aurore Bibard - DSNA - Head of ATFCM division for Airspace Dpt

This presentation is not meant to be an exhaustive summer 2019 performance report, that having already been done by NM. The participants are asked to feel free to interrupt for any details.

En-route delays decreased significantly during summer 2019 compared to 2018(approximately 30%), thanks to a collaborative summer planning and AOs adaptation measures. France accounts for 21% of delays across Eurocontrol area, compared to 33% in the previous year.

The Strategic CDM planning has brought us into a virtuous circle with less regulation, a more stable network and so less delays that gave operational actors more stability. That stability was positive not only for our FMP but also for airline's OCC.

Due to weather issues in LFMM and LFEE area, DSNA relaxed twice some RAD measures pre-tactically..



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Nevertheless, there is still room for improvement, in particular regarding:

- Scalability, considering that all the measures were scheduled around April, when gradual implementation could have alleviated the impact on AOs.
- Flexibility on D-days. As most of the measures are RAD measures, the OCC have great difficulty to take advantage of the relaxation. Flight plan adherence, to be sure to use all the available capacity predictability and stability is needed and pilots should be part of that challenge.



To conclude this S19 performance review, DSNA draws airlines attention to a specific and repeated capacity inefficiency issue met by FMPs: it has been noted that even when the constraints is no longer effective, some flights continued as they were still in effect.

Having identified the above strength and weakness from S19, DSNA has mentioned some initial responses and will seek the advice of the airlines on these:

- To increase scalability, measures should be adapted to the traffic demand, the season (April, May and October vs July and August) and may even vary between weekdays and week-end.
- To decrease delays in Marseille ACC, DSNA is asking for more off-loading of Marseille ACC in the eNM process for summer 2020.
- To improve common understanding of the situation, DSNA is working on better ways to inform airlines of the predicted constraint areas.
- To improve capacity, as a consequence of better stability, DSNA wants to keep working on flight plan adherence projects such as yoyo trial. Besides, DSNA would like to work with airlines on the heavy flights issue (requested flight level impossible to reach due to the aircraft's weight). The ability to update the flight plan with a cruising level consistent with the aircraft weight in case of late modification is critical.
- **To enhance resilience of the network during adverse weather situation**, DSNA has asked to include Bordeaux, Brest, Marseille and Paris ACC in the weather cross-border trial with Reims ACC, NM and DFS is part of that approach.

Anne Pavageau, FMP manager for Bordeaux ACC, gives an example of some airlines filing flight plans taking into account the eNM constraints even outside of official schedules.

Flights departing Brussels are levelled at FL330 maximum until Bordeaux ACC entrance between 9 AM to 3PM. Some airlines continue to file FL 330 all day long. It is a loss of efficiency for the airlines as flights could climb to their cruise level before LFBB entrance. It also induces more complexity in Bordeaux ACC sectors which have to climb these flights to their cruising level whereas that stabilisation was not needed for Reims or Brest anymore..

dgac DSNA

Heavy flights represent another issue: as they are not able to reach their planned flight level, they are not counted in the right control sectors. It distorts the traffic load prediction on sectors, which can induce unnecessary ATFCM measures and unpredictable overload on other sectors, jeopardizing safety.

It also worsens the ATFCM measures. Indeed, a flow controller noting that heavy flights enter a sector protected by a regulation while they are not planned in that sector, will take margins the next time the regulation is required to take into account those non-expected flights and therefore will reduce the regulation rate.



AIRFRANCE /

Mr Raphael Eyrolle sees many potential explanations for the flight levelling described. The CFSP's interpretation could play a significant part. He regrets their absence to this meeting. He underlines that the complexity of the RAD sometimes leads to "creative" flight planning. Besides, on difficult days, dispatchers may choose the quickest way to settle cases. But, in any case, recomputing each flight is not practicable.

Regarding the flight levels, the pilots have been reminded of the issue many times. From the cockpit, the flight plans are sometimes too complex to be checked in detail. And, finally, it is precisely just before departure that the pilots often have to deal with unexpected events, including passengers refusing to board, making it hardly possible to focus on the flight planning eventual issue.



Mr Gerd Mattes adds to Mr Raphael Eyrolle's explanation that, regarding flight plan adherence, AOs do broadcast the message to pilots to update the flight plans but reaching all pilots is as difficult as reaching each ATCO in their ops room he guesses.

However, within the vast community of airspace users, the level of information is already significant. He is quite sure that this trend will continue into next summer.



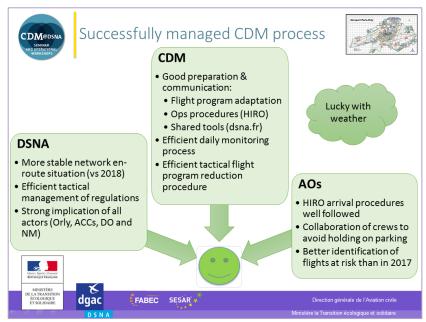
Experience on LFPO Runway's closure

Jérôme DUFOSSEZ – DSNA - Airlines relations manager for Airspace Dpt

For this 18-week period of runways overhaul, a full coordination was organised with the airport CDM, the local ATS, the national CDM, the 5 French ACCs, NM and the airlines, in an attempt to limit the impact on flights, especially the risk of exceeding curfew, bearing in mind that there is very little margin for curfew extensions at Orly.

Multiple factors helped the situation unfold well:

- ATC and pilots were committed to optimize the runways use as much as possible. High Intensity Runway Operations worked well for arrivals (less for departures).
- **Preparation and communication upstream were solid**. The flight program reduction was necessary to cope with the amount of traffic at Orly during opening hours.
- Common awareness of the situation thanks to the use of a common tool to monitor the daily situation on the dsna portal
- Good cooperation with NM when help was needed from outside DSNA for some flights.



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However, some improvements could be done:

- The sequencing by DSNA in the event of non-standard procedures can be improved, notably, when a wave of departures is slightly delayed, the capacity on arrivals is significantly impacted.
- Misunderstanding on the curfew extensions process. Indeed, the monitoring process was sometimes mistaken for a way to request curfew whereas the standard procedure with the RPO in Orly was still to be followed
- The main issues were:
- **flights plans not being updated soon enough**, resulting in the inability to analyse the real traffic demand and inducing over-regulation
- Cancelled flights with flights plans remaining in the system, wasting available capacity **Timely** updating of flight plans is essential in these altered situations.
- Some airlines did not communicate at all, even during the conference calls. In this case, DSNA could not provide any form of support whatsoever.



Mr Raphael Eyrolle deems that, overall, good work has been accomplished.

Regarding lack of updating flight plans from some AOs, Raphael explains that, it is difficult for the OCC to inform at the right moment, as the stations sometimes do not issue their own data until they see the flights coming in.

AIRFRANCE /

Regarding participation in the CDM conference calls, most of the main users do take part. However, having only a limited workforce, they cannot be present at every conference. A more realistic expectation would be to have the main operators in attendance.

Finally, it is not because the works are coming to an end that all the action taken over the recent period should be discontinued.

DSNA informs that the tool has been implemented to address curfew situation. It automatically issues warnings for AOs, free of charge, so that attention can be paid to the flights which need it.



DSNA

He reminds that the number of extensions granted was very limited. Indeed, from the start, the National Authority clearly stated that there would be no extensions during the works. Actually, less than 20 extensions were granted over the whole period, a very low figure, especially with some days extremely impacted by technical problems or weather conditions.

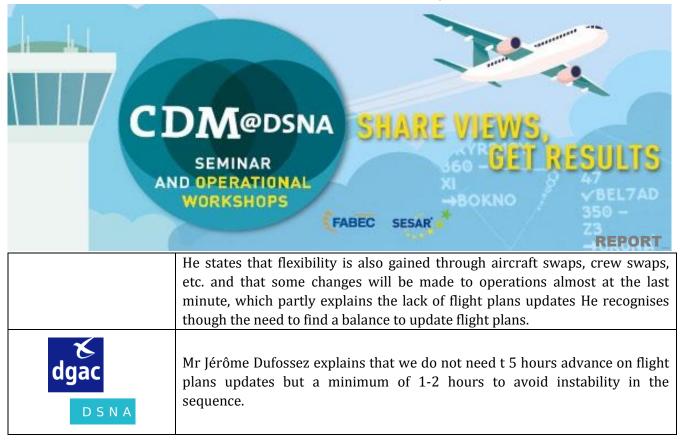
Approximately 300 flights were diverted, cancelled, re-programmed on CDG or postponed to the next day. According to the programme, the maximum number of flights per day was 650 in August and 680 thereafter. On one occasion the 650 flights were exceeded. The 680 flights were nearly reached (672).

Operations ran quite smoothly, facilitated by the large predominance of west-facing configuration, which made it possible to use Runway 20, but also Aigle Azur's closure of operations..

easyJet

Mr Geoffrey Kingston explains that Orly is the largest of the 30 European bases for EasyJet.

However, they do not have the resources needed to monitor an ACDM tool or attend a call for each of the bases every day. He is aware that non-participation may lead to missed opportunities and diminished accuracy.





Mr Cyril Canu expresses Transavia's thanks for the information provided by the DSNA and all participants in the process.

He highlighted the disparity in the speed of approach requested by ATC for the Boeing 737 and that expected by the pilots.

René Feillet concludes by reiterating that this process mobilizes a lot of workforce and demands a dedicated organisation to be made durable for everyday operations. DSNA is working on it and currently has a project to extend the French AMC to ATFM and CDM functions, including this kind of help to airlines process. It is not to be expected in an immediate future though.



2020 AIRSPACE EVOLUTION

New wide military areas ZENA Gascogne and ZENA Atlantique

Sarah de Mazancourt - DSNA - Deputy Head of Airspace Department

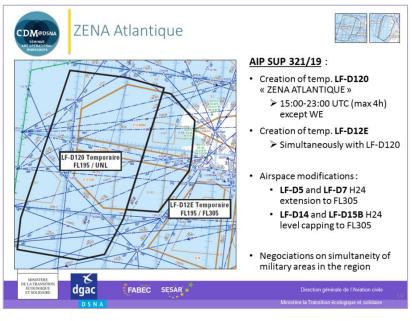
ZENA Atlantique, in the western part of France, and ZENA Gascogne in the South-West are two new very wide military areas requested to accommodate the need of the military to train on new missiles. A huge work of negotiation has been carried out to mitigate the impact of these areas by fine-tuning the design and the activation conditions of the areas as well as other areas In the same region or impacting the same flows.

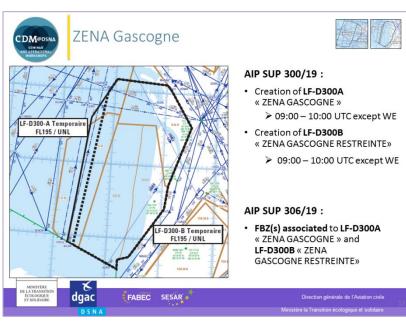
Both the Gascogne and Atlantique ZENA areas will first be published in trial mode (SUP AIP), from December 5th to March 25th.

Based on the lessons learned, new activation conditions may be determined for the summer and a second trial will be carried out for the summer. Only after a return on experience on a whole summer will a final decision be made.

DSNA emphasises that the work has been collaborative with the military, both parties trying to reach an optimum for both parties' needs and constraints.

Besides, work continues in order to publish as many areas as possible in the AUP-UUP, to enable better flexibility of fight planning and more predictability.





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Participants are encouraged to look at the publications, which contain all the details needed.

Thomson Airways	Mr Björn TIffert asks why the areas are not all published in the AUP/UUP.
O DSAÉ DREAM BREAM BREA	LCL Thierry Lerousseau from DIRCAM (French military) explains that in some cases, the information needed is not available on the day before. The Navy used to operate in these areas without notice. Efforts of acculturation on this process began one year ago. It will likely take another one or two years before this effort is complete. The DGA, responsible for in-flight tests, is preparing to put out a publication on its activities.

easyJet	Mr Geoffrey Kingston asks how the success of the zones will be determined in the two trials, wondering also whether the airlines' feedback will be sought.
dgac D S N A	Mr Christian Quenet, Brest ACC head of ATS, explains that westbound transatlantic traffic was taken into account to produce the maps shown and hours of activation. He adds that DSNA also made a commitment to IATA to monitor the city pairs impacted and determine alternative routes where possible. Sebastien Brondel, FMP manager for Brest ACC, strongly encourages the airlines to send their feedback in, not only in terms of regulations but also the impact of extra mileage etc. Any arguments or feedbacks are welcome.
O DSAÉ	LCL Thierry Lerousseau adds that the Navy's use of these areas will be monitored. The area was designed to create a specific field for Rafale, with the new armament system, Meteor. The Navy will be held accountable for the way in which it is used.





Mr Geoffrey Kingston asks to see Tango 9 on the map, wishing to confirm that it is not affected and that French airspace can thus still be avoided on strike days.



René Feillet confirms for Tango route and adds that such areas are usually not activated on strike days. When strikes are foreseen, a message is sent to the military asking not to activate, as far as possible, a specific list of areas The new ZENAs have been included in that list.



Mr Vincent Hilligers asks why the area has to be activated from FL190 to unlimited rather than enabling multiple layer-areas to be activated at once. It could be the opportunity to discuss about the levels activated in a real CDM process with AOs.



DSNA

DSNA replies that the message has already been passed on to the military,. For the time being, the expressed need is FL195 to unlimited, unlayered. The hours are thus very restricted. However, the discussions are not closed and the layering may come up in exchange for more flexible hours of activation.

Jet2.com

Mr Andy Braid asks about the impact these zones may have on the introduction of the free-route air space, in Brest and Bordeaux and whether the existence of the large space implies the roll out of intermediate points in the free-route airspace at the edges



DSNA

Sebastien Brondel, FMP Manager for Brest ACC, states that work is in progress to take into account the areas with intermediate points and flight buffer zones. ZENAs will be treated according to the FUA process, and run as usual, with FBZ and flight plan rejections.





William Galvez, Bordeaux ACC head of ATS, would like to discuss not 2020 but 2021. At the previous day's event, Colonel Christophe Hindermann showed a map of the free-route airspace and the next large areas to come, most likely in 2021. DSNA will probably require help from the aircraft operators to provide arguments on the design, for example through the network manager. He refers to the project to be known as Southwest ZENA, from Biarritz to Clermont-Ferrand, and Pyrenees to the Alps. It would form a large wall on Bordeaux's upper airspace, from 195 to unlimited. So far, the DGAC has estimated the project impossible to achieve without a major impact on Bordeaux upper airspace, but also Spain, the UK and the North of France.

The military was therefore encouraged to discuss it with the network manager and review the impact together.



Andy Braid assures him that he will definitely be helping out. He states that a request was filed with RNDSG some 15 years ago, regarding the interface between Bordeaux and Barcelona. He considers military impact as not acceptable on one of the busiest routes for north-south traffic during summer. The extra mileage, CO2 burn and costs would not be tolerable.



DSNA

René Feillet foresees definitely lengthy negotiations. The design will have to be 4D, that is to say it might be different depending on the time of year. While some wide military activity might be acceptable in the middle of winter, it is very difficult in the summer. Both parties will need to work together to find the solution they both regard as best.



Björn TIffert asks for visual projections, an impact assessment and a way to collect the argument from AOs.



DSNA

René Feillet reminds that the discussions on the Southwest ZENA haven't really started yet; they should do so sometime over the course of 2020.

He also reminds that there is no mandatory consultation of airspace users for airspace above Level 115. There is such a consultation only for the lower airspace. Above FL115, discussions involve only DSNA and the Ministry of Defence.

In that sense, DSNA serves as the defender of the airlines. There will be no hard publications on the Gascogne and Atlantique ZENA for at least one year. Trials will be held first, to determine the level of acceptability for the Air Force and the Navy (ability to train efficiently), for the ACCs (operational feasibility), and for airlines (acceptability of expected impact).



Evolution of R108 flight planning modalities (FBZ)

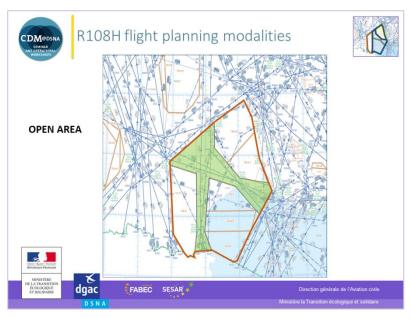
Marie-Christine Ouillade - DSNA - FRA manager in Airspace Dpt

In order to prepare for Free Route, DSNA wants to have all restricted areas and military areas treated according to FUA concepts.

To illustrate this, DSNA point outs a not very well-known area untitled R108H on which airlines currently don't have visibility. This is a test flights area for Airbus or Dassault.

It is a very large restricted area, whose activity will soon be published on the AUP with pertaining FBZ implemented so that airlines will be able to plan direct flights crossing the area from France to Barcelona in the green zone even when activated.

DSNA is implementing there an unusual way to build FBZ that brings more capacity.



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Lufthansa

Mr Gerd Mattes asks whether the buffer zone is a part of an NM process.

DSNA confirms that is all done according to NM processes. She also adds that this area will be published in March 2020.

René Feillet concludes this discussion, reiterating that: these negotiations and planning processes are mandatory for FRA implementation. Efforts between DSNA and the French Air Force were initiated many years ago, and now include flight testing activity. While the military was reluctant at the outset, it now sees that this cooperation is possible. And as Thierry Lerousseau from DIRCAM said before, the next step will consist in bringing the Navy in the process at the same level of cooperation.



ATFCM

Improve handling Weather situation

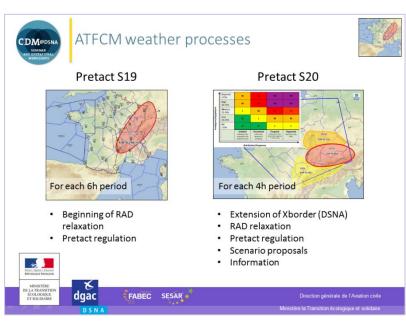
Stephanie CROCETTI - DSNA - FMP manager for Marseille ACC

- Marseille ACC is subject to bad weather throughout the year, in particular in the summer. To handle these, regulations have to be implemented to preserve safety. Marseille ACC often gets questions from pilots not understanding why their flight is caught in a weather regulation whereas the weather is good.

Actually, to be efficient, these regulations need to be implemented before the weather event happens, when the traffic is not airborne yet, so that the number of flights handled in the disturbed sectors at the time of the event is reduced. The weather regulations are implemented at least three hours in advance. Therefore, of course, actual conditions may sometimes not match weather forecasts and the regulation can sometimes be implemented a bit too early. However, NM urges to implement regulations as soon as possible. There is also often a need to regulate not only the impacted sector but also adjacent sectors where flights may be diverted.

The process runs as follows:

- A weather forecast is issued by the MET service provider on D-3, D-1 and D-Day.
- The Ops room is informed of the conditions for the following day, regarding staffing and weather.
- Negotiations are initiated to relax RAD measures where possible
 In the event of very severe weather conditions, some ACCs
- weather conditions, some ACCs implement pre-tactical weather regulations.
- Last year, Reims ACC participated with KUAC, MUAC and the NATS in a cooperative experiment launched by NM for weather management across ACCs



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called the cross-border weather trial. It consisted in sharing weather forecasts among participating ACCs to try and take coordinated action based on a common situational analysis.

- For 2020, DSNA has asked that all French ACCs take part in the cross-border weather trial with NM.





Mr Vital Bride, Reims ACC head of ATS, adds that Reims produced a post-ops analysis of the cross-border weather trial and found out that the correlation between foreseen need for weather regulations predicted at D-1 and real implementation of necessary regulations at D-day was good. Moreover, the participants unanimously felt that the process had been useful, laid down strong foundations and yielded helpful results.

Nevertheless, the process involved a great deal of coordination by telephone, which should be replaced by a portal or chatbot, to facilitate participation. In France, pre-coordination may be organised, to take into account all five ACCs, before discussing with the other players.

Mr Gerd Mattes indicates that he took part in an NM meeting in late-September for the first time as a stakeholder of the airline group. On two occasions this year, his colleagues asked to relax the RAD regulations for one day or for a few flights, returning from Portugal and Spain, due to poor weather conditions but it was unacceptable, from the perspective of the Ops rooms.



He also requested better coordination. Benefiting from a removed RAD restriction is a challenge for Lufthansa since it has no established process in the moment with the flight planning service providers, and rather considers the RAD as a hard fact. It is essential that to put in place a communication procedure of some kind by next summer.

He is ready to provide e-mail addresses that the French Ops rooms could approach, in order to make use of RAD relaxations. The situation can be managed, with the appropriate procedures, including with the NMs. A manual method is a necessity to manage exceptions in very bad weather situations. With an adequate flight planning tool, this is possible, subject to confirmation by NM. This should not be seen as a long-term development, and instead a solution for the following year.



DSNA confirms that work is being carried out in the right direction, specifically to address bad weather conditions in Marseille and Reims ACCs. Every effort will be made to organise something with NM and Lufthansa for the next summer, probably not a large-scale trial.

Aurore Bibard invites airlines to contact her, as DSNA is definitely interested in working on the process to inform airlines. It also wants to secure automation to whatever extent possible.





DSNA

Mr Vincent Hilligers adds that some successes were posted this past summer from the technical standpoint, in lifting restrictions due to weather. He thanks his present counterparts for that, but also recalls how much coordination was required for this to happen. He invites his colleagues to carry on and turn the current efforts into a process.

AIRFRANCE /	Mr François Eraud asks if ATC controllers have a thunderstorm display on their screen.
dgac	Stephanie Crocetti indicates that thunderstorm is not on the radar screen, but on an adjacent screen on the control position. Anyway, the timescale is no longer that of ATFCM; the flights are already airborne, and in a sector. It is not a time for regulation, but for helping ATCOs to be aware of the situation.
Thomson Airways	Mr Björn TIffert suggests, in order to gain the full perspective and provide real value to all operators through the weather trial and the RAD relaxations, that Austria be brought into the discussion.
dgac	Vital Bride believes this may have been done already.



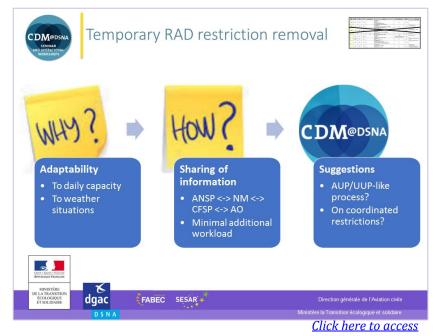
How to communicate with stakeholders around a temporary RAD restriction's removal?

Ludovic ISNARD – DSNA - Head of ATFCM Methods & Planning office in Airspace Dpt

RAD restrictions are sometimes removed in response to necessities such as weather conditions. The process by which they are removed is referred to as an increment file: a request is send to NM RAD team and they remove the restriction in the RAD document.

- Every day, changes are made, gathered by the CFSPs, reflected in their tools and used to change flight plans accordingly.

It is generally agreed that such changes are not feasible in a large-scale situation. Especially in a "dynamic RAD" management, the process would become quite painful for everyone.



Yet, dynamic RAD would be very useful to provide both predictability and flexibility to adapt restrictions to the real situation.

Therefore, it is essential that a new system be built. The RAD for next summer is being built now; it would be helpful if it could be adapted daily for greater safety and efficiency.

Prior to the Eurocontrol RAD Management Meeting held last Friday, DSNA had asked that this topic be placed on the agenda. However, Eurocontrol prefers to build its process inside its own structure first before presenting it to any outside party. Yet collaboration is needed in order for the process to be accommodated easily by the CFSPs, AUs, ops rooms etc. The current project seems not to be taking this direction at the moment, which is considered an issue by DSNA. Discussion will need to begin quickly between Eurocontrol and all stakeholders.

One option DSNA suggests for a future dynamic RAD management is a process similar to the AUP-UUP process, with which the CFSPs are familiar. On D-1, the ANSP could assess the correct relaxation for the following day, incorporate this into a document addressed to all users (AO, CFSPs), thus giving the airlines enough time to take this information on board and build their flight plan for the following day. DSNA is now very interested to collect airlines thoughts on the topic.





Mr Gerd Mattes has discussed this idea at Lufthansa on several occasions. It has received support, but needs free-route airspace – an area on which DSNA is specifically lacking behind.

The AOG-CFSP meeting one day before the AOG is the right place to raise the issue and make it work. He invites DSNA to get in touch with the flight-planning service providers to discuss about their capability..



DSNA

DSNA states that discussions are of course ongoing with NM. As to CFSPs, she agrees that their absence leaves a gaping hole at the present meeting. This year, as every year previously, they are addressed invitation upon invitation to attend, but unfortunately they never do. She thus recommends any participants present to urge them to attend, at least from time to time, to discuss with all players and not only the airlines.



Mr Vincent Hilligers suggests that the best forum for discussion would be the AOG, as all the parties needed to discuss the process would be present.

Mr Raphael Eyrolle agrees that AOG can attempt to have the topic included on the agenda. He also concurs with Gerd about the need to have a broader perspective, with full cross-border free-route airspace, rather than focusing on tackling the issue of RAD.

AIRFRANCE /

He also deems that it is too late for a change in CFSP by next summer. Larger projects are underway. For next summer, he suggests aiming only for a small-scale pragmatic solution: a well-coordinated RAD-free route might be possible in the context of the weather trials. He feels that the focus should also be placed on providing a solution on a more global way for the future: as Gerd stated, born of a common proposal. If DSNA came to NM, without FABEC being in the room, there would be almost no chance of bringing such a project to fruition. He thus advocates a small package of solutions that would help the FMPs to identify or remove the measures, as well as the impacts that removal would have.

Mr Raphael Eyrolle suggests the NOP portal network headline news would be the best way for next summer to communicate to airlines the potential RAD restrictions removed



SUMMER 2020 PREPARATION

First elements on eNM/ANSP S20

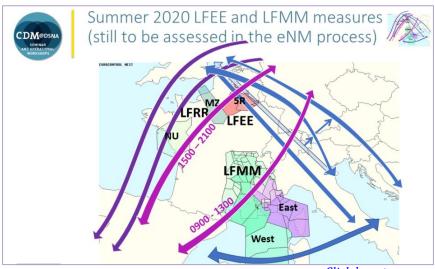
Aurore Bibard – DSNA – Head of ATFCM division for Airspace Dpt

Aurore Bibard presents first the set of scenarios agreed with NM for winter from January to-March 2020 to alleviate LFEE 4F training impact. Those scenarios will only be asked if and when needed.

The summer 2020 eNM measures are still under negotiation but DSNA will ask to:

- Push to the west some city pairs of the South-West axis flow should be at peak hours, as in \$2019. Flights from the Scandinavian and Northern countries to Spain, Portugal, the Canary Islands, and perhaps the Balearic Islands would be pushed to the West.
- Implement a flip-flop process for part of the South-West axis between Marseille ACC in the morning, and Reims-Brest-Bordeaux ACCs in the afternoon. Those measures could be relaxed in case of bad weather.
- Push traffic to the south of Marseille ACC East area, from or to the Canaries, to Italy, the Balkans, and Greece. Push to the east part of South-East axis flow,





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mostly Italy from/to UK flows to avoid Marseille ACC, and in consequence push to the east other flows currently going through Reims ACC. The number of flights affected would be slightly over 100. However, in line with the principle of scalability, the measures would be rolled out gradually. Current work is focused on the city pairs, to establish the best routes.



Mr Raphael Eyrolle confirms he has received the measures proposals via the AOG, but only a few days ago. His comments will thus be only general.

He emphasises the need for scalability, to implement the measures only when needed. A key point is the end date of the measure. It is important to cancel them if not needed, even if it's before the provisional date (unlike previous year).

AIRFRANCE

Moreover, from January 2020, Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) comes into effect, adding further pressure on the airlines to drastically reduce their CO2 emissions. Airlines such as EasyJet and Air France are also offsetting their CO2 emissions. If crisis-resolution measures of this kind are to be used beyond next year, it is important to show scalability and flexibility scenarios, and provide CBA to airlines to convince their management as well.

easyJet

Mr Geoffrey Kingston asks whether the schemes presented are the worst-case scenarios.



DSNA

Aurore Bibard confirms this. Moreover, the schemes will thus not come into effect automatically on $1^{\rm st}$ April. It will be implemented based on needs. Besides, DSNA is hoping for a positive outcome from the social negotiations ongoing in which case less measure would be needed.

easyJet

Mr Geoffrey Kingston asks about possible conflicts between the ZENA areas and the measures forcing traffic to active zones. He adds serious doubt about the summer trials for ZENA Gascogne, which appears to be in conflict with the measures.



DSNA

Christian Quenet, Brest ACC Head of ATS states that, if a conflict does occur, RAD relaxation will still be possible. However, more risk will likely be held in the northeast, where a new ZENA will be created, across Germany and France. For the time being, the trial remains to be signed by the two partners.

Sebastien Brondel, FMP manager from Brest ACC, explains that the LORCU to CORUL direct routing will still be available, even if the ZENA is activated. The ZENAs will impact mostly the westbound flows. That explains the choice of



the activation period late in the evening, when the westbound flows have ceased. The purple flows will not be affected by Zena Atlantique. The Gascogne ZENA will affect the Bilbao-Belem route. In 2021, it will go primarily through Lissac-Limoges.

DSNA adds that the ZENA areas will be handled with FUA restrictions so that flight plans cannot be accepted through ZENAs when active.



Mr Björn Tiffert is very concerned by the consequences of the most easterly flows which affect the traffic from UK to Greece. Indeed, on the Greek Islands, we are already facing aerodrome capacity issues, airport positions being sorted by NM,.



Sebastien Brondel reports that discussions have already begun on this point. Some traffic will need to be shifted to the east but it has to be done carefully. For instance, if traffic from the UK to Italy is moved slightly more to the east, then it will cross the Greek flow over Switzerland or Germany, thus significantly increasing the complexity and reducing the capacity. The plan needs to be designed carefully, in good coordination with all ACCs and fine-tuned to be suitable for everyone involved.

Ludovic Isnard adds that obviously, if some Greek airports cause some problem, they may be removed from the restriction. For now, it is just a big picture presented and details still have to be discussed.



Mr Geoffrey Kingston adds another case with the route from Milano to UK. It is one of his airline's most frequent sectors, and has already had additional mileage added to it in the last year, due to airspace changes over the city.



DSNA

Aurore Bibard explains that a Milano flow is not taken completely outside of France. Entering via the Reims KD sector would be possible but it was too complicated to put 50 European measures on one chart.

Moreover the table shown reflects DSNA request, not the end-picture. This topic will be discussed at the eNM meetings.



Mr Vincent Hilligers expresses his amazement at the foreseeable impact of these measures, after the already-disastrous Summer 2019 for the Italian destinations, the south of Spain, etc.

He is very concerned about this added measures and their applicability over



the entire summer. He anticipates many exceptions being requested. He also asks whether these measures are also valid for lower airspace.

He also suggests that carbon emissions be added to these numbers as well, to see the impact it will have on some airlines. Indeed, with a large amount of traffic pushed into Karlsruhe, more flights will be pushed north causing many delays.



Jonathan Colson, Paris ACC Head of ATS, states that, below Reims airspace, lies Paris airspace, which is dedicated to arrivals to Paris airports. Some traffic departing from Italy can already fly through this area below FL345 but RAD restrictions are in place and Paris won't be able to handle more traffic on this route.

Aurore Bibard adds that the delay assessment is being carried out for Reims and Karlsruhe under both scenarios. If it proves preferable to fly via Reims, this is the decision that will be taken. There are several different measures that could be taken in Italy, depending on the departing area.

Vital Bride, Reims ACC Head of ATS states that every effort will be made to keep the impact to a minimum, in coordination with the airlines and the NM. Transparency will be the rule as the process goes forward.

OWS's Conclusions

René Feillet - DSNA - Head of Airspace Department

René Feillet thanks the participants. Next OWS should probably be held around November 2020. This next workshop will probably deal with free-route implementation and 4-FLIGHT transition plan for Paris ACC.