	Summary of Conclusions FINAL	
	Subject:	9th ADR.TEC
	Date:	14 - 15 April 2021
	Location:	WebEx IT Platform

Organised by: **Flight Standards, Air Operations and Aerodromes Department, Aerodromes Standards and Implementation Section (FS.2.4)**

List of Participants: see at the end of the notes

SoC prepared by: Sarah Poralla

SoC reviewed by: Oyvind Hallquist

AI 2-Welcome and introduction.

- Special round of introductions, incl. IATA, A4E, EBAA, ASA (guests and prospective new members)
- New secretary to the ADR.TEC (S. Poralla)

ADR.TEC Chair Mr. Hallquist welcomes participants and asks invited guests (EBAA, A4E, IATA, ACI alternate Mr. Maderna) to introduce themselves. Mr. Fidato (ACI) explains that he will continue to be in the SAB yet discontinue the ADR.TEC in favour of Mr. Maderna, also from Milano airport. Mr. Gamba from the Aircraft Services Association (ASA) was joining later due to other obligations. The ADR.TEC was informed that on EASA´s side, the secretariat function will now be covered by Ms. Poralla instead of Mr. Sekulic, who was thanked by the Chair for his work over the last 10 years.

AI 2 - Adoption of the agenda

Agenda was accepted.

AI 3 - Summary of Conclusions of the previous meeting and **Review of the ADR.TEC action list** and closure of open actions.

The summary of the conclusions was accepted. Secretariat presented and reviewed the Action list (see list at the end).

AI 4 - EASA Sustainable Aviation Programme and focus on ADR domain developments

The project manager for the EASA Sustainable Aviation Programme (ESAP), Mr. Bloemen presented the workstreams, which cover elements such as green standard setting, sustainable fuel, the facilitation of air transport electrification & de-carbonisation, guiding research towards zero emissions aviation, environmental transparency (eco labels), managing the environmental impact of drones and air taxis, as well as international co-operation for environmental capacity building. One of the other elements aims at more sustainability for flight standards, also encompassing aerodrome operations, looking at operational or design-related areas where CO_2 reductions or other environmental gains could be made.

The ADR section´s focal point for environment, Mr. De Moor, followed up with the ADR specific areas identified for further exploration:

1. **ADR regulation – our core business:**
   - Checking the regulation for sustainable enablers, evaluating barriers.
   - Beware about potential conflicts between safety and environment.
   - Outreach on environmental innovation to ADR TEC and TEB, ... (!)

2. **Electrification of vehicles and taxiing:**
   - Taking stock of developed technologies.
   - Re-evaluation under the current circumstances.
3. **New fuels and energy:**
   - Link up with ESAP work stream on Sustainable Aviation Fuel and Hydrogen.
   - Ensure ADR aspects are taken into consideration in research.

The ADR.TEC welcomed the presentations on this important topic. The Chair indicated that sustainability is about a lot more than environment but that EASA is mainly limited by the BR. He also identified that the electrification of aircraft for short-distance flights should be part of the focus. Apart from that, he sees a potential for technological innovation by allowing larger degrees of simulation and virtual reality (VR) in the delivery of training (e.g. for RFF). Suggestion to stay out of ecology and biodiversity as these topics are already heavily regulated by national laws. ACI mentioned that for SAFs (Sustainable Aviation Fuels), the bottleneck is currently their price and their limited availability. Airport operators need to think about where they should be positioned in the value chain for the new fuels. In this context another ACI representative notices that hydrogen fuel development is supported by Europe and that it is also technology into which the aircraft industry puts a lot of faith (e.g. Airbus in a recent webinar by Eurocontrol). ERAC supports EASA's focus on sustainability and mentioned that the spatial gains due to the design CS for runway strips already come with some potential for the placement of photovoltaic panels, while the forthcoming reform of the OLSs could benefit the installation of windmills nearer to aerodromes. ERAC believes that there is a lack of knowledge about the potential environmental gains on items already on the table now. Fraport mentioned that their project with electric and autonomous taxiing vehicles (E-taxi and Taxibot) was not net-positive, due to the need for engine warm up by aircraft. The pilot projects by Lufthansa at Frankfurt airport concluded that such alternative taxi methods only pay off at aerodrome where there is a long taxi distance.

==Action 1-1-2021: ADR.TEC members are asked to give input/feedback on the ADR aspects of EASA's sustainability agenda and to point out to EASA potential for enablers in the ADR regulatory framework. Deadline: 30 June 2021.==

AI 5 - ADR. Industry community
Mrs. Zakoula-Cherdron from the SM directorate presented the results of the Management Board of Dec. 2020 where the new format for technical/ industry advisory bodies was discussed and blessed. It was also decided that 2021 would allow learning from test cases (pilots) of which the ADR domain is one of two. SM pointed out that the value-added lies foremost in increased and easier interactions among industry with a new IT tool (platform for meeting documents, exchange of information and collaboration) to give EASA feedback into important new/ emerging topics or EPAS items.
SM presented the the Communities approach in the following way:
New set-up:
- New members and involvement of subject matter experts in case needed for certain topics.
- Yearly work Programme agreed by ADR Industry Community and coordinated with SAB and MAB.
- Improved online collaboration platform.
Benefits:
- Wider membership (now also with airlines and GH sector representatives)
- Efficiency:
  - Topic-driven discussions on priorities defined in Work Programme, based on Industry needs and aligned with resources.
  - Better use of digital tools.
  - Flexibility for interfaces with other stakeholders e.g. from Member States, individual experts, on topics, and eventually also for use by RM tasks.

Following this the ADR section gave more details on the plans for the community approach. In reaction, the ADR.TEC, just like Industry at the SAB meeting in March raised some concerns on the new working method and

asked for a clear demonstration of the value-added and explanations for the governance of the "Industry Communities". Examples of such concerns are how topical groups would report back to the plenary and the chair, and if such groups would have any decision-making powers. An additional external factor is the ongoing C-19 pandemic, which has an impact on availability of industry experts. However, an improved IT tool / platform is very much appreciated, and it is hoped that it can really be an improvement and enable the new approach.

Action: 2-1-2021: EASA to organise an extraordinary mid- year meeting of ADR.TEC to explain the new tool and to also discuss the topics to work on, as well as clarify questions on governance of the community approach. In preparation of the meeting the ADR section should collect candidate cross-domain topics from the members of the ADR.TEC. *(meeting date is conditional on tool availability and a new candidate for chairman of ADR.TEC).* Deadline: Q3/2021

AI 7 – Impact of COVID-19

- **ACI Europe** presented an economic outlook, highlighting the severity of the economic crisis of airports in Europe. The airports in this region are suffering the hardest in the world, with 70% reduction in passenger numbers compared to 2019, equal to 1.73 bn lost passengers. European air traffic is back to its 1995 figures (pre-route liberalisation). A setback by 25 years in its growth. Implications on airport revenues is extreme with 30 bn Eur lost in 2020.

- The 2021 traffic is following the pessimistic scenarios that were predicted last year. **Quarterly passenger traffic development in 2021 will depend greatly on vaccines and travel restrictions.** Losses in 2021 are predicted to remain extremely high with 25 bn Eur compared to 2019. Airports are cancelling investment projects where it is possible. Airports are cutting all avoidable costs, especially using employee salary support schemes offered by governments to manage labour costs. Staff lay-offs are becoming significant. Many smaller aerodromes are facing bankruptcy, while some larger airports can take out funds from the capital markets but will be burdened by debts. In most countries the airports are required by law to remain open.

- European air connectivity is decreasing; direct (minus >50%) and indirect connectivity (minus >85%) (i.e. connectivity via a hub).

- **The Airport Services Association (ASA)** presented its organisation and the COVID-19 situation. ASA is open to all GH Service providers that undertake Passenger Services (terminal and airside), Ramp Services or Cargo & Warehouse Services. In 2019 there were ca. 650K jobs in GH, working for 3 types of GH: independent, self-handling and airport subsidiaries. Independent GHSP have a worldwide market share of 60-65%. In 2020 65% of all employees have been furloughed or laid-off. Job retention schemes were by far the most useful, if not the only, support GHSPs could count on. In many cases though, these schemes have come to an end in 2020. 2021 will see many GHSP go out of business.

- ASA mentioned three major **pain points of the GH sector:**

  1. **Lack of common legislation and/or commonly accepted standards.**

  1. **Reliance on industry standards** by ACI and IATA aimed at bringing operational harmonization.

  2. **Cost-cutting pressure** and related difficulty to preserve quality and safety standards (relatively short licences, commoditisation of the service, variety of service adaptations due to requests by airlines).

- **Future challenges:** GH training and recognised courses to improve worker fluctuation. Digitalization is important for the sector, but investments are low for more fundamental shifts. Greening: whilst emitting less than 0.2% of the overall air transport industry 's CO_2 (numbers based on 2019 figures), the sector can improve its greenhouse gas emissions further by opting for electric GSEs.

AI 15 - AOB

The chair of the ADR.TEC announced his retirement from the chairmanship due the effects of the crisis on the Avinor company. He will retire from ADR.TEC and SAB.

AI 08 - Safety assessment guidelines for the implementation of EGNOS-based IFR approaches to non-instrument runways located at aerodromes serving General Aviation

Mr. V. Foltin (PCM/ATM Expert, CT.2.2) presented the joint work by EASA and the European Global Navigation Satellite Systems Agency on an agreed method to assess the safety of EGNOS[*]-based IFR approaches to non-instrument runways located at aerodromes serving General Aviation. While most of these aerodromes are out of the scope of the BR and thus the EU aerodrome rules, the operations are subject to EU air ops regulation. Currently the document, that is to be finished soon by EASA and the GNSS Agency, foresees to limit these approaches to GA non-commercial operations with aeroplanes, and thus to exclude CAT operations. The weather minima to be used would be equal to Visual Meteorological Conditions (VMC) Approach with visual manoeuvring (circling), and only at aerodromes with non-instrument runways (NI-RWYs), that are only served by AFIS or UNICOM, and not by ATC. The so-called GSA document will be published in mid-2021 by the GNSS Agency, after all involved parties have made their last contributions. ADR.TEC is invited to support implementation of EGNOS-based IFR approaches to non-instrument runways at General Aviation aerodromes.

ADR.TEC members welcomed the work and ERAC asked for EASA to consider a safety study of the German BMVI at Altenrhein airport (St. Gallen) during which many EGNOS approaches were flown successfully and safely using EGNOS. EBAA cautioned that the document should not dismiss the possibility to allow such approaches also for business jet operations/charter flights (i.e. CAT operations), because the danger of illegal charter is always a risk, and therefore it might be better to permit CAT operations to use the new procedures. EASA took note of the concern.

AI 9 - Rulemaking update and feedback on ADR Standardisation activities:

- Update and discussion on latest rulemaking developments / outputs
- Presentation of the coming Opinion Information Security Risks (RMT.0720)
- Update on EPAS programming
- Feedback on ADR STD activities

EASA provided an update of the finished, ongoing and upcoming rulemaking tasks.

RMT.0591 – Regular update of the aerodrome rules (1st and 2nd stream)

- Review of comments submitted on NPA 2020-10 is ongoing

RMT.0722 – Provision of aeronautical data by the aerodrome operator

- ToR published on 14 APR 2021. EASA is asking the collaboration of ADR.TEC (i.e. aerodrome operator organisations) in providing data for the impact assessment phase before the NPA. The collection of data from the aerodrome operators will be performed through a dedicated survey.

RMT.0728 – Ground handling

- Work resumes in Q2/ 2021, and Ms. Egerer presented Ms. Szonyi, new RM officer. She will lead the Ground handling RMT.

RMT.0161 – Conformity assessment (framework for the acceptance for ATM/ANS and later for safety-related ADR equipment)

- there are several work streams and CS for ADR safety-related equipment will be provided after 2023, when the framework is put in place.

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[*] European Geostationary Navigation Overlay Service (EGNOS) is Europe's regional satellite-based augmentation system (SBAS) that is used to improve the performance of global navigation satellite systems (GNSSs), such as GPS and Galileo. It has been deployed to provide safety of life navigation services to aviation, maritime and land-based users over most of Europe.

RMT.0379 – All-weather operations

- Related Opinion is expected in Q2/2021.

RMT.0720 – Management of information security risks

- Mr. Anton presented the forthcoming Opinion, which will impact the ADR rules under AR and OR rules, and later the GH Service providers management system rules as well. The related Commission Regulation and ED Decision are expected in Q2/ 2022.

RMT.0230 – Drones subtask Vertiports (1ˢᵗ and 2ⁿᵈ step)

- Mr. Sekulic presented the work done under this task and explained the two steps of the rulemaking. In the first step, the Prototype technical specifications (PTS) for the design of vertiports. Said PTS will be provided, as the guidance for the possible implementation in the national regulatory framework. In the second step a full set of rules for the vertiports under the scope of the BR will be provided, including Implementing rules and Certification specifications.

EPAS 2022-2026 Development cycle

- - EASA presented only a timeline for the next EPAS exercise.

In the discussion the ADR.TEC noted the high number of new and updated rules that are coming into force right now and asked for the issuance of the related consolidated easy access e-rules (PDF and online) at the earliest convenience. Also, because the national airport associations produce translations of the ADR rules and for that purpose require a file-type (doc) that allow seeing the track changes of the "change information" documents. The ADR section is asked to provide more usable formats can be provided upon request.

Action: 4-1-2021: EASA to investigate how to provide word file versions of new issues of CS, AMC and GM (incl. Track charges) to industry stakeholders for a specific purpose and upon request to the Agency. Deadline: Q3/2021

Post meeting note: EASA would like to inform that regarding this request the following solution is suggested: current versions of MS Office 365 Word can open PDF filed from within Word. This will allow for the conversion of these files into Word documents with seemingly all features (strikethrough, colours etc.) remaining intact. While EASA cannot guarantee that this method will work with very large PDF will therefore not take responsibility for the resulting word documents, we nevertheless suggest that ADR.TEC should explore and test if this solution satisfies the needs expressed by ACI. The related action 4-1-2021 will be proposed to be closed at the next full ADR.TEC meeting.

Feedback on ADR Standardisation activities

- 2020: four out of ten planned ADR standardisation inspections were performed: Two normal on-site comprehensive inspections (before pandemic) were conducted. Two focused inspections "remote inspections" (follow-up activities) were conducted. But onsite standardisation inspections were postponed due to COVID-19.

- 2021: Focussed (follow-up) inspections take place remotely when appropriate. No postponements of comprehensive anymore but replaced by partial (remote) inspections to be completed later with a focussed (on-site) inspection to cover the gap and ensure a comprehensive review.

- First cycle of ADR standardisation inspections: 12 out of 30 MS remaining.

- Other activities include the organisation of a Workshop (COVID oversight).

AI 10 - Drones and airports

- Safe integration of drones in terminal airspace (UTM)
- Drone infrastructure requirements at airports (VTP ad e-VTOLs)
- "Drone Incident Management at Aerodromes"

- Due to the agenda delays, the Chairman and Secretariat postponed the whole AI 10 to a future meeting, see Action: 2-1-2021.

AI 13 - ICAO developments in the ADR domain

Mr. T. Romig from ACI World gave a comprehensive overview over the ADR related ICAO work streams under the Aerodrome Design and Operations Panel (ADOP). Mr. Romig stated that the number one topic for ACI at ICAO level is the further development of the Ground handling rules (GH).

Some member of the ADR.TEC said that the market-liberalisation approach will not solve problems to do with the safety of GH. ACI World mentioned the importance of the safety of ADR operations coming out of C-19 crisis, as well as all the new rules accompanying the GRF (Global Reporting Format) and the worldwide transition to GRF. Outside of ADR domain the overall C-19 health safety topic of aviation as a whole and Return to Operations is of outmost importance right now. The top (future) objective is however to make aerodromes sustainable given climate change.

Mr. Mayer from ERAC also mentioned the OLS (Obstacle Limitation Surfaces) taskforce at ICAO, which he believes is a reform the rules on the protection surfaces and bring them closer to the "real" need and provide more flexibility. In this context ERAC mentioned the ICAO-ACI OLS Symposium at 8-10 December 2021 with the objective to present the new OLS concept to industry and interested parties.

Commented [PS1]: Pls take note of new dates !!!!

AI 14 - Technical / innovation issues (Carry over item from 02-2020):
- ADR.TEC is invited to propose examples.

EASA introduced the topic by asking ADR.TEC is to give to EASA topics/ innovations that would progress further with new or improved rules to facilitate their introduction. The chair mentioned that of course passenger facilitation and terminal management sees a lot of innovations such as use of biometrics, automation and robotics, while for the airside services and operations, the most innovation is in the area of simulated training for RFFS staff and vehicle drivers. The Chair referred to the Avinor presentation given in Meeting #1/2019 on VR-technology and driving simulators and informed that the focus in Avinor was to develop better driving simulators for RFFS as this technology was more promising than VR at this time (this update closes action 6-2-2019) Also, the automated measurement of RWY characteristics is an area where many tools are expected. There are by now also autonomous winter cleaning vehicles, pavement marking vehicles, lawn mowers and signage cleaning machines.

ACI mentioned that currently innovation is of greatest interest where environmentally friendly and automated processes are combined for cost-saving. Invisible solar panels in the glass fronts are also of great potential. Digitalisation inside the terminal is of great importance to facilitate "touch free" passenger processing, as it will reduce disease spreading.

Action: 5-1-2021 ADR.TEC to provide a list of most promising innovation items that enhance safety and environmental sustainability to EASA. Deadline: 30 June 2021.

Action: 6-1-2021 ACI and EASA to organise facilitated joint WS on how airport Innovation can contribute to enhance safety and environmental sustainability. Deadline: Q4/2021.

AI 15 - AOB

RFFS response time **AMC5 ADR.OPS.B.010(a)(2) Rescue and firefighting services RESPONSE TIME**. RWY's vs. "any other part of the movement area"

With respect to the response time objective in the above AMC, the Chair informed that the CAA of Norway finds the objective not clear enough and asks airports to perform towards the ICAO REC 9.2.29 of not exceeding 3 minutes instead of allowing for what is locally achievable to any other part of the movement area.

EASA informed ADR.TEC that the European harmonisation at the time of the RM development required a compromise, with which those countries with higher and lower response times to "any other area of the movement area" could work with. Also, EASA did not want to create an additional financial burden to aerodromes that were not able to meet the ICAO recommendation, by the time that the rules were drafted.

The ADR.TEC highlighted that the wording is different from ICAO but sufficiently clear. UFA agreed with the comment.

- Position of Chairman of the ADT.TEC.

Mr. Hallquist referred to his retirement from all EASA related tasks and thanked everyone for the meeting and was thanked by all ADR.TEC for his contribution over the years. EASA and the other members of the ADR.TEC thanks Oyvind for his work over the last two meetings. EASA will be in touch with the ADR.TEC members for the extra-ordinary meeting.

Next meetings:
Mid-year meeting on ADR Industry Community: 7 July 2021
ADR.TEC#2/2021: 24-25 November 2021
ADR.TEC#1/2022: tbd

Attendees ADR.TEC:

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Guests:

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EASA: Eduard Ciofu, Julia Egerer, Sarah Poralla (Sec.), Paola Galmarini, Jozef De Moor, Daniel Galic, Joaquin Arturo Lopez Corella, Vasileios Stafanioros, Simona Tarlie, Predrag Sekulic, Adina Szonyi

Jeremie Teahan (Strategic Management, Head of Section SM.2.2)
Savina Zakoula-Cherdron (SM. 2.2)
Dietmar Bloemen (Sustainable Aviation Programme manager, CT. 1.1)
Vladimir Foltin (PCM/ATM Expert, CT.2.2)
Juan Anton-Bernalte (Head of Section, Cybersecurity in Aviation & Emerging Risks

Action List:				
8-2-2018	EASA to provide guidelines on how to deal with new CS issues in forthcoming rules developments.	EASA		To be closed when FAQ item is developed.
4-1-2019	EASA is reviewing the comments on RMT.0379 AWO and will report back TEC ADR.	EASA		Closed – Covered in the RM overview.
6-2-2019	ACI, Avinor, to keep the ADR.TEC updated on RFFS training simulation devices.	ACI, Avinor		Closed
7-2-2019	ERAC to prepare a letter for the Safety promotion material on runways condition definitions.	ERAC		Closed
1-2-2020	EASA to invite the EASA D4S team to one of the next ADR.TEC meetings.	EASA		Open Planned for 2-2-2021
2-2-2020	EASA to prepare presentation on the aerodromes relevant RMT in other domains for the next ADR.TEC meetings.	EASA		Closed – on-going
3-2-2020	ERAC to submit a written question on the issue of non-instrument runways; EASA to provide further clarification on the issue.	ERAC, EASA		Closed – recent GRF WS covered many questions.

1-1-2021	ADR.TEC members are asked to give input/feedback on the ADR aspects of EASA's sustainability agenda and to point out to EASA potential for enablers in the ADR regulatory framework.	ADR.TEC members	30-Jun 2021	Open
2-1-2021	EASA to organise an extraordinary mid- year meeting of ADR.TEC to explain the new tool and to also discuss the topic to work on, as well as clarify questions on governance of the community approach. In preparation of the meeting the ADR section should collect candidate cross-domain topics from the members of the ADR.TEC. *(meeting date is conditional on tool availability and a new candidate for chairman of ADR.TEC).*	EASA	Q3/2021	Open
3-1-2021	Members of ADR.TEC to identify a suitable candidate for chair of the ARD.TEC and to communicate this to EASA, so that the elections can be prepared at the earliest opportunity.	ADR.TEC	Q3/2021	Open
4-1-2021	EASA to investigate how to provide word file versions of new issues of CS, AMC and GM (incl. Track charges) to industry stakeholders for a specific purpose and upon request to the Agency.	EASA	Q3/2021	Open
5-1-2021	Members of ADR.TEC to provide a list of most promising innovation items that contribute to safety and environmental sustainability to EASA	ADR.TEC	30-Jun 2021	Open
6-1-2021	ACI and EASA to organise facilitated joint WS on how airport Innovation can contribute to enhance safety and environmental sustainability.	ACI and EASA	Q4/2021	Open Comment: related to actions 1-1-2021 and 5-1-2021.