



Airlines for America™
We Connect the World

MSG-3 to MSG-4 Transition plan proposal

March 1, 2024

High level Background

- Pre-2022 IAM – a survey was administered w/~65 response (industry & NAAs)
 - Majority of stakeholders favored shift to MSG4
 - Introduction of IAHM (IP180) / Qualitative judgement
- IMRBPB requested a working group be formed (AI 2022-05)
 - Tasked to develop a recommendation / white paper

AI 2022-05	2022 June	IMRBPB Leadership and MPIG/RMPIG Leadership, by 2022 ILM Meeting, to discuss the preparatory work to form the MSG-4 Working Group.	IMRBPB Leadership MPIG/RMPIG Leadership	IMRBPB Leadership would discuss with MPIG/RMPIG Leadership on 2022 IMM (5th Oct 2022) MSG-4 WG created	Closed	IAM 2023
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- A working group of ~ 30 persons formed, grew to > 40 over time
- A core group formed (to developed content)
- The larger group reviewed and provided comment

The MSG-4 working group

Name		Category	Representing
William	Heliker	Regulator	Faa
Dodd	Mike	Regulator	Faa
Luca	Tosini	Regulator	Easa
Rocky	Johnson	Regulator	Faa
Raffaele	IOVINELLA	Regulator	Easa
Jin	Wang	Regulator	Caac
Li	Xiaolei	Regulator	CAAC
Dragos	Budeanu	Operator	Iata.Org
Osvaldo	Da Silva Junior	Operator	Azul
Avril	Benson *	Operator	American
George	Weed	Operator	FedEx
David	Piotrowski	Operator	Delta
Chris	Iaconis	Operator	Delta
Carnucci	Chris	Operator	SWA
Manny	Gdalevitch	Operator	Aeronovo.Ca
Leonard	Beauchemin	Operator	Aerotechna.Com
John	Sullivan	Operator	Oliverwyman
Chris	Markou	Operator	Iata.Org
Michael	Hansen	Operator	SWA
Kevin	Berger	Operator	A4A

Name		Category	Representing
Nicole	Elders **	DAH	Rolls Royce
Ty	Peace	DAH	Timco
Oliver	Weiss	DAH	Airbus
Darren	Smith	DAH	Collns
Christine	Lindauer	DAH	Airbus
Maciej	Razniewski	DAH	Boeing
Alan	Souza	DAH	Embraer
Franck	Liotte	DAH	Safrangroup
Armando	Chieffi	DAH	Archer
Felix	Kranich	DAH	Airbus
Gordon	Bruce	DAH	Fokker
Alessandra	Batalha	DAH	Wisk
Jan	Schirmer	DAH	Rolls-Royce
Phillip	Naylor	DAH	Rolls-Royce
Dither	Flores	DAH	Wisk
Vasu	Nambeesan	DAH	Beta.Team
Jeffrey	Miller	DAH	Miller
Yiping	Wang	DAH	Comac.Cc
Ravi	Rajamani	Academia	Drr
Iordanis	Tseremoglou	Academia	Tudelft
Robert	Meissner	Academia	Dlr
James	KORNBERG	Academia	3Ds

Core task force member

- Task force chair

** Task force co-chair

High level Background

- The product was the white paper finalized December 2023
 - Highlighted forward looking challenges
 - Identifies gaps which MSG-3 may not adequately consider
 - The paper will be published as an A4A report
- The working group separated into workstreams (e.g., systems, structures, zonal...) to perform further analysis
 - They compared MSG3 content against the white white paper
 - A gap matrix was created

High level Background

- The large gaps needed to prepare for the next generation aircraft



How do we get there ?

Transition criteria set by A4A

- Avoid concurrent management of two(2) standards (MSG-3 & MSG-4)
- Design and document an “MSG-3 to MSG-4 transition plan” that is acceptable to A4A, the IMRPB and MPIG/RMPIG stakeholders
- Avoid/minimize impact to the communications and procedures document
- Avoid/minimize impact to the IMPS, except for necessary MSG-4 CIPs
- Utilize existing processes to the extent possible

Transition Proposal

- Assign matrix content a sequential phase number (1,2,3)
 - Translates to a 3-phase process and schedule
- Utilize current CIP review and approval mechanism for the transition
- The “MSG-3 to MSG-4 transition plan” becomes a section of the document
 - References the MSG4 White Paper
 - The Gap matrix w/Phase assignment and target schedules
- The MSG4 working group members / sub-teams will staff and develop the CIPs

Transition method

- Phase 1 – 2025 Adopts 2023/24/25 IPs
 - Some will be the MSG3-MSG4 phase 1 gaps
 - Option – MSG-4 CIPs could be uniquely identified
 - MSG-3 is re-identified “MSG-4”
 - CIP process is used for MSG-4 proposed content
 - We envision the potential for some ad-hoc IMRBPB review requests
 - A temporary two(2) year revision cycle is adopted for the transition
 - Facilitates MSG-4 content adoption within ~ 5 years
 - Current cycle (3 year) is - 2025, 2028, 2031, 2034...
 - Proposed cycle (2 year) would be 2025, 2027, 2029, 2031, 2034...

2025 currently planned Phase 1 : Blend volume 1 and 2, move IAHM into the systems analysis, harmonize terminology, add Ground Based Equipment terminology, L/HIRF analysis update, Update General Content and add new Figure 1-3-2.1 and harmonize Glossary

Transition method

- The transition plan becomes part of the document (e.g., appendix).
 - If the plan requires change it will be subject to the CIP process
- Phase 2 (2025-2027)
 - CIPs will be proposed per current SOP
 - Some will be the MSG3-MSG4 phase 2 gaps
 - Approved 2026 and 2027 IPs will be adopted in the 2027 rev.

2027 currently planned Phase 2 : Update structures section analysis and logic workflow to incorporate hybrid materials and other new materials, incorporate SHM, incorporate Ground Based Equipment evaluation into the MSG-4 process

Transition method

- Phase 3 (2027-2029)
 - CIPs will be proposed per current SOP
 - Some will be the MSG3-MSG4 phase 2 gaps
 - A transition plan CIP is also possible
 - Approved 2027 and 2028 IPs will be adopted in the 2029 rev.

2029 currently planned Phase 3 : Update Zonal workflow, EWIS and other large zone GVI inspection types into the zonal workflow, update communication and task transfer process between all sections of analysis.



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Questions?