

## **Considers the Process to Gain EASA Part 21G Production Organisation Approval**

**Sofema Aviation Services (SAS)** Consider in depth the relationship between a part 21 G organisation and a part 21J organisation, how to create a new business and gain a part 21G certificate. How to proceed if the Part 21G does not have a 21J partner.

### **Introduction 21G ↔ 21J Roles & Responsibilities**

- **21J (DOA)** owns/controls the approved design data (type certificates, STCs, repair/major change approvals, ETSOs, etc.) and supports continued airworthiness. EASA requires DOA–POA coordination so that production always matches the approved/controlled design.
- **21G (POA)** demonstrates conformity to the applicable design data, releases items (EASA Form 1) or whole aircraft (Form 52 C of A), and holds production privileges and obligations under Subpart G.

EASA explicitly requires satisfactory coordination between design and production (DOA↔POA). This is codified in 21.A.4 and 21.A.133 with AMCs that describe the documented arrangement linking you (POA) to the design approval holder (DAH).

### **If you do not have a 21J partner: what can you manufacture?**

Without a DOA of your own (21J) or a documented arrangement with a design approval holder (TC/STC/ETSO/repair approval holder), a 21G cannot show conformity to approved design data for most aviation parts—so you cannot release them on EASA Form 1 under 21.G. You still have these options:

#### **Standard parts** (per AMC 21.A.303(c))

- These are parts whose design/manufacture/inspection/marketing data are in the public domain via an officially recognised standard (e.g., fasteners to NAS/MS, certain generic components). For standard parts, Form 1 is not required for installation eligibility (derogation in 21.A.307(b)(1)); a supplier/manufacture declaration is sufficient if the installer holds that document.

#### **Build-to-print for a DAH under a documented arrangement**

- If you're producing to someone else's approved design (TC/STC/ETSO/repair), you must put in place the 21.A.133(d) link/arrangement. This enables you to receive controlled design data, get Direct Delivery Authorisation (when applicable), control configuration, and legitimately issue EASA Form 1.

#### **Subpart F (Letter of Agreement) as a stepping stone**

- If you're not yet ready for 21G, you can request **Subpart F** (EASA Form 65 Letter of Agreement) for low-volume/simple technology or transitional needs—but long-term production is expected to migrate to 21G.

### **ETSO route (Subpart O)**

- You could pursue ETSO authorisation for an appliance and then produce it (still requires appropriate design capability/arrangements).

### **To Issue EASA Form 1**

To issue Form 1 for anything other than standard parts (or narrowly exempted cases), a 21G must be linked to the design holder via 21.A.133(d) documented arrangements—or be the design holder.

### **Step-by-step: How to gain a 21G approval (POA)**

#### **Step 1 — Define your scope & sourcing of design data**

- Write a clear scope: which products/parts/appliances and to which applicable design data (TC/STC/ETSO/repair approvals). This will become your Terms of Approval.
- If you do not have your own DOA, line up documented arrangements with the DAH(s) whose designs you will build (see Step 3).

#### **Step 2 — Apply (21.A.134) and plan the means of compliance**

- Submit your application under 21.A.134 and explain your means of compliance (21.A.134A).

#### **Step 3 — Put in place the DOA–POA arrangement (21.A.133(d))**

- The AMC provides a sample arrangement listing responsibilities for transfer of design data, configuration control, dealing with deviations, non-conformances, continuing airworthiness support, and Direct Delivery Authorisation if applicable. This is mandatory whether DOA and POA are in the same legal entity or separate.

#### **Step 4 — Build your Production Management System (21.A.139)**

- Establish and document your production management system (policy, processes, controls, independent monitoring, internal audit, risk controls, supplier control, configuration, records, competence, etc.).
- Include the **Information Security Management System (ISMS) clause (21.A.139A)** if required by scope.

#### **Step 5 — Develop your POE (21.A.143)**

- Your Production Organisation Exposition must describe your organisation, scope, procedures, interfaces (including the DOA–POA arrangement), supplier control, release procedures (Form 1/52/53), permit to fly procedure (if sought), etc.

## **Step 6 — Prove Resources & Competence (21.A.145)**

- Demonstrate sufficient facilities, equipment, tools, staff competence, certifying staff, and the independence/authority of the compliance function.

## **Step 7 — Inspection, testing & conformity processes (21.A.126–21.A.130)**

- Define inspection/test regimes, management of non-conformances and statement of conformity leading to Form 1/Form 52 issuance.

## **Step 8 — Define Privileges sought (21.A.163)**

- Typical privileges: conduct production, issue EASA Form 1, obtain C of A for new aircraft with Form 52, maintain new aircraft you produced and issue Form 53, and (optionally) issue permits to fly under agreed procedures. Ensure your POE covers any maintenance/permit-to-fly privileges you request.

## **Step 9 — Understand Obligations (21.A.165) and Validity (21.A.159)**

- Use the POE and referenced docs as **basic working documents**, remain open to authority investigations, and maintain **satisfactory control** of manufacture to keep the approval valid.

## **Step 10 — Approval & Terms of Approval (21.A.151)**

- Your authority EASA will issue the POA certificate and Terms of Approval listing scope, products, and/or categories you can release under 21.A.163.

## **Step 11 — Manage changes (21.A.147 / 21.A.148 / 21.A.153)**

- Significant PMS changes or location changes need **prior approval**; changes to Terms of Approval require application.

## **Your initial production portfolio (no in-house 21J)**

### **Viable near-term build plan without your own DOA:**

- Standard parts line (fasteners/hardware to recognised standards) with robust traceability and supplier QA. These are eligible for installation without Form 1 when the installer holds your declaration—use this to build revenue/capability while your 21G matures.
- **Build-to-print** for one or more DAHs (TC/STC/ETSO/repair approval holders) under 21.A.133(d) arrangements so you can issue Form 1. Start with non-critical parts and scale to critical/primary structure as you demonstrate system maturity (and as the DAH approves).

- Consider Subpart F for early prototypes/low volume (time-boxed) while your 21G system, POE, and staff authorisations are finalised.

## **Typical issues & challenges (and how to avoid them)**

### **Design link gaps**

- Issue: Missing or weak DOA–POA arrangement; uncontrolled design data changes; unclear configuration baselines.
- Fix: Use the AMC sample arrangement and ensure end-to-end processes for data transfer, change control, concessions/deviations, and Direct Delivery Authorisation where needed.

### **Form 1 eligibility mistakes**

- Issue: Issuing Form 1 without approved design data, or for a standard part (not needed).
- Fix: Train certifying staff on 21.A.130/21.A.307 and your release criteria; do not “upgrade” standard parts with Form 1 unless design/eligibility requires it.

### **Supplier control & traceability**

- Issue: Incomplete incoming inspection, weak control of outsourced special processes.
- Fix: Embed strong supplier approval & surveillance within your 21.A.139 PMS; define receiving inspection, process qualification, and certificates/CoCs content requirements.

### **Non-conformances & concessions**

- Issue: Ad-hoc fixes; no formal link to DOA for design deviations or repairs.
- Fix: Route concessions, rework, and repairs via procedures aligned with the DOA; never release product that deviates from approved design without approved deviation.

### **Keeping the approval valid**

- Issue: Authority identifies lack of “satisfactory control of manufacture.”
- Fix: Maintain robust internal audit, competency management, and CAPA; examples of what “unsatisfactory” looks like are listed under GM 21.A.159(a)(3)—use them as a self-check.

### **Best-practice blueprint (what great looks like)**

- Early, formal DOA–POA arrangement(s). Use the AMC sample and tailor it: responsibilities, data transfer cadence, deviations workflow, configuration/data ownership, and continued airworthiness support.
- POE that people actually use. Treat POE + referenced procedures as the basic working docs (an explicit obligation). Keep it controlled and current.
- Clean release logic. A short, visual decision tree for Form 1 vs. Declaration (standard parts; negligible safety-effect parts defined in ICA/CS-STAN; ELA cases) reduces errors at the line.
- Configuration control by design family. Tie each part number to an unambiguous design baseline and effectivity, with clear change incorporation rules.
- Supplier special process control. Pre-qualify, audit, and list approved sources for coatings, heat treat, NDT, etc., within your 21.A.139 PMS.
- Right-sized internal audit & competence plan. Calibrate to your scope; audit for 21.A.139 effectiveness, not just paperwork.
- Change discipline. Pre-agree with the authority what counts as significant PMS changes or location changes and obtain approvals under 21.A.147/148.

**Quick decision guide for your new business - We want 21G but no 21J in-house.  
What's our minimum viable path?**

1. Launch a standard parts line now (no Form 1 needed for installation eligibility; provide robust declarations).
2. Secure one strong DOA–POA arrangement with a DAH for a first build-to-print package (so you can release on Form 1).
3. If necessary for prototypes/low volume, request Subpart F as a time-boxed bridge while you finish your 21.A.139 PMS and POE for full 21G.
4. Scale scope/Terms of Approval as competencies, audits, and supplier base mature.

Next Steps please see [www.sassofia.com](http://www.sassofia.com) for Classroom or Webinar Training & [www.sofemaonline.com](http://www.sofemaonline.com) for online training - for comments & questions please email [team@sassofia.com](mailto:team@sassofia.com)