

Requirements Manual for Business Partners

1. Purpose and Scope of the Manual

Beyond Gravity (BG) acknowledges the critical role our Suppliers play in delivering value to our Customers. As an extension of our operations, we depend on our suppliers to provide processes, products, and services that fully comply with BG contracts, applicable specifications, and the quality management requirements bounded in this document. These general operational quality requirements do not override any conflicting provisions specified in BG contracts, orders, drawings, engineering specifications, process specifications, or applicable long-term agreements (e.g.: Code of Conduct for Business Partners), and shall be read together with BG's General Terms and Conditions for Procurement (GTC-P). In case of any inconsistency, the GTC-P governs legal and commercial terms (including order acceptance, penalties, termination, audit rights, export controls, confidentiality, insurance, force majeure, and applicable law/jurisdiction). Where this Manual sets stricter operational requirements (e.g., records retention), the stricter requirement applies unless otherwise agreed in contract.

This manual defines the scope of supplier responsibilities, ensuring alignment with the industry standards, regulatory requirements, and continuous improvement initiatives. Requirements are applied based on the potential impact of the supplied product or service on flightworthiness, mission safety, mission success and regulatory compliance.

Under no circumstances is cooperation allowed with suppliers, sub-tier suppliers, or entities located in blacklisted or embargoed countries.

Please note that it is the supplier's responsibility to ensure continuous compliance to the latest revision of this document and any of the referenced documents herein. Latest version of this manual is available on the Supplier Management Tool in use.

1.1 Relevant definitions and applicability

- **Flying hardware:** Any product, material, software, special process output, or service that is:
 - Installed on, integrated into, or directly interfaces with a BG flight unit/system
 - Or whose failure, malfunction, or nonconformance could:
 - Compromise mission success, system safety, or integrity or continued operational capability
 - Result in loss of vehicle, payload, or mission
 - Affect flight, launch, ascent, orbital, re-entry, or operational performance
 - Invalidate qualification, acceptance, or verification of flight hardware

This definition explicitly includes, but is not limited to:

- Mission- or safety-critical hardware

- Special processes applied to flight hardware (e.g., welding, heat treatment, composite layup, coatings)
- Mission-critical tooling, test, inspection, and verification activities used to demonstrate compliance to mission or system requirements
- Software and firmware embedded in or used to control flight hardware
- Tools, fixtures, and test equipment whose output is used to accept, qualify, or certify flight hardware
- Packaging

- **Non-flying hardware:** Any product, material, software, process, or service that:
 - Is not installed on, nor directly interfacing with, a flight unit/system
 - Does not affect mission success, system safety, or configuration integrity
 - And whose failure would not invalidate qualification, acceptance, or verification of flight hardware

This includes, but is not limited to:

- Ground support equipment not used for acceptance or qualification testing
- Manufacturing aids and shop tools not used to verify flight requirements
- Logistics, and handling equipment
- Training articles and non-flight prototypes
- Administrative, IT, or support services

All externally provided products and services shall be classified as Flying Hardware or Non-Flying Hardware in accordance with this section. Non-flying hardware may never be substituted for flying hardware without formal requalification and acceptance by BG.

Note that "intended use" and "actual use" govern classification, not part number series or supplier interpretation.

Formal classification at contract award or PO release:

- Every purchased item or service must be designated as Flying or Non-Flying in the PO, drawing, or statement of work.
- The classification decision remains with BG, not the supplier.
- Any change in use requires reclassification and reapproval by BG.

All requirements in this Manual apply to Flying Hardware, unless otherwise stated in the contract between the Supplier and BG.

For Non-Flying Hardware

- Fit-for-purpose QMS acceptable
- Reduced documentation and traceability
- Simplified change notification
- Risk-based inspection and acceptance

1.2 Supplier's Responsibilities and Expectations

Suppliers are expected to:

- Ensure product quality by meeting all engineering, technical, contractual and purchase order specifications.
- Adhere to aerospace industry regulations, including AS9100 and BG's internal standards.
- Maintain transparent documentation and reporting, allowing for audits and quality assessments.
- Implement risk management strategies to prevent defects, delays, non-conformance and production disruption. The principle of risk avoidance shall take precedence over risk acceptance or risk mitigation, wherever reasonably possible.
- Commit to continuous improvement through innovation, efficiency, and proactive corrective actions.
- Implementing contingency plans, ensuring operational continuity in case of disruptions.
- Have formal documentation of quality and performance.
- Digital tracking of specifications, ensuring full traceability within the supply chain.
- The supplier is responsible for ensuring full compliance with all applicable federal, state, and local laws, regulations, and ordinances — both in the performance of the order and in the conformity of all products, parts, and materials supplied. Unless explicitly stated otherwise, all applicable and referenced standards, laws, and guidelines shall be understood and applied according to their most recent valid edition.
- ITAR Control - Documentation and other information provided by BG to the Supplier may contain technical data, the use of which is restricted by the U.S. Arms Export Control Act. Such technical data shall not be transferred to any foreign person in the United States or abroad, except as authorized by the U.S. Department of State or the International Traffic in Arms Regulations (ITAR.)
 - Where ITAR or other export control restrictions apply to supplies or services, BG will take these requirements into account in the supplier selection process, obtain the necessary governmental authorizations, and enter into a separate

agreement on this subject with the suppliers concerned.

1.3 Supplier Obligations to Flow Down Requirements

Suppliers are responsible and accountable for flowing down contractual and regulatory requirements to their sub-tier suppliers, ensuring:

- QMS and industry compliance requirements at all levels of the supply chain.
- Clear and documented communication of technical specifications, preventing deviations and maintaining full traceability of requirements flow-down.
- Formal agreements, detailing quality expectations and responsibilities.
- Ongoing sub-tier supplier performance monitoring and non-conformance tracking, identifying and resolving discrepancies promptly, evaluating corrective action effectiveness and ensuring adherence to flow-down requirements.
- Electronic and physical record retention, preventing data loss and ensuring verification integrity.
- All mandatory customer-related specific requirements, including applicable FAR and DFARS clauses, ensuring compliance throughout the supply chain.
- Personnel screening must be in place to ensure the reliability and security of individuals involved in the supplied products and services.
- Non-company personnel (e.g.: visitors) must not have access to BG specifications, semi-finished, or finished products.
- Procurement of raw materials from high-risk or untrusted sources (e.g.: countries known for counterfeiting) is only permitted if the material is tested and qualified according to inspection requirements defined in advance and approved by BG.

Other requirements flow-down may be added at BG's discretion, as this list is not exhaustive.

1.4 Right of Access for Beyond Gravity, Customers, and Regulatory Authorities

BG, its Customers, and Regulatory Authorities maintain the right of full access to suppliers and their sub-tier facilities and documentation, ensuring:

- Full visibility into applicable areas of supplier operations, allowing audits, inspections, and compliance reviews.
- Access to relevant production records, ensuring transparency and traceability.
- Collaboration with regulatory bodies, demonstrating adherence to industry standards.
- Supplier cooperation with BG's oversight teams, ensuring continuous compliance validation.

- Ongoing supplier engagement and audit readiness, facilitating verification at any level of the supply chain.

Notification shall be provided to the Supplier in advance such activities.

1.5 BG Assets

- All assets provided or used in connection with the order — whether intangible (e.g. files, data received, processed, or deleted) or tangible (e.g. materials used, transformed, or transferred) — shall remain the sole property of BG at all times ("BG Assets").
- The Supplier may access, use, or process BG Assets only as necessary to fulfill its obligations under the Order, or as expressly instructed by BG in writing. The Supplier and sub-tiers must not allow any third party to access, use, or modify these assets for any other purpose.
- BG may, at any time, require the Supplier and its sub-tiers to alter, update, destroy, or return any BG Asset. All such actions must be carried out promptly and under the Supplier's full responsibility.

1.6 Revising Supplier Approval Status

BG has processes in place to assure initial selection, evaluation of capabilities, approval and monitoring of its Suppliers. Suppliers shall be placed on the Approved Supplier List (ASL) upon approval and shall be removed from the ASL based on unsatisfactory performance in one or more of the considered categories.

BG reserves the right to review and revise, at any time, the status of an approved supplier and take any of the following actions:

- a) Inactivation - Supplier is removed from the approved list;
- b) Surveillance or Probation status: Supplier is monitored closely but may continue with limited operations.

In making such a decision, any criteria deemed relevant may be considered, including, but not limited to:

- Quality and delivery performance;
- Delayed, inadequate, or missing responses to Corrective Action Requests (CARs)
- Suspected unapproved parts/materials;
- No direct or indirect business transactions for a prolonged period;
- Change in supplier's manufacturing, processing capability or manufacturing location;
- Any breach deemed severe of the BG Code of Conduct for Business Partners; Any safety-related concerns.

Implications of being placed under surveillance or probation status can include:

- Ongoing production and deliveries under existing contracts may continue, nevertheless, no new bid solicitations will be issued;
- The supplier will be required to:
 - Develop and implement a corrective or improvement action plan approved by BG.
 - Submit a follow-up status report as agreed with BG.
 - Undergo more frequent audits by BG, at the supplier's expense, if deemed necessary.
- At BG's discretion:
 - BG may assign its personnel or a designated third party to oversee the supplier's on-site action plan until confidence is restored in the supplier's QMS, product conformance, and process controls.
 - BG may enforce Source Inspection — on all or selected shipments — for the duration of the probation period, at the supplier's cost.

2. Quality Management System Requirements

2.1 ISO 9001 Compliance Requirements

BG Suppliers are responsible for the development, documentation, implementation, and maintenance of a Quality Management System (QMS) according to ISO 9001 latest revision (at minimum, or as defined by specific purchase order and/or contract), with the certification scope explicitly covering the supplied product/service.

This includes:

- Regular audits to maintain compliance with aerospace regulatory frameworks.
- Implementation of quality control measures aligned with industry's best practices.
- Process documentation to ensure traceability, reliability, and risk mitigation.

BG suppliers are expected, though, to fulfill Space Minimum Requirements, such as general awareness training, FOD prevention throughout production and logistics and counterfeits parts prevention.

Suppliers' QMS shall be formally documented, implemented and maintained to ensure that supplier's products conform to the identified purchase specifications, engineering or material specifications and/or contract requirements. This documentation shall be made available to BG for review upon request.

2.2 Supplier Approval and Qualification Process

BG requires suppliers to undergo a rigorous qualification process, according to its risk evaluation, including:

- Pre-assessment evaluation, verifying production capability, compliance history, and risk management protocols.

- On-site audits, conducted periodically to assess adherence to BG's quality standards.
 - Suppliers with a valid Nadcap accreditation that covers the applicable critical process within its scope will be exempt from on-site audits.
- Continuous monitoring, tracking performance metrics, defect rates, and corrective action effectiveness.
- Approval renewal cycles, ensuring long-term compliance with aerospace requirements.

2.3 Records Retention and Traceability Requirements

Suppliers must maintain detailed records for product traceability and quality assurance, including:

- Retention of all manufacturing, testing, and inspection records for a minimum of 7 years (or as specified by contract).
- Complete traceability of materials, from raw components to final applications.
- Secure storage of electronic and physical records, protecting against data loss or unauthorized access.
- Compliance with industry-wide traceability standards, preventing counterfeit parts risks and ensuring supply chain integrity.

2.4 Supplier Resources Working Within BG Facilities

The supplier is responsible for ensuring that any personnel assigned to BG facilities by - or on behalf of the supplier - performing work (including repairs and reworks) is competent, are properly trained, and experienced in the defined tasks.

Supplier procedures for verifying and authorizing personnel competency must be documented and made available upon request.

Prior to commencing work, BG site team will provide necessary training and awareness to the supplier's personnel regarding applicable internal processes, including:

- QMS, including Product Safety requirements, FOD Control, key characteristics and critical items, and special requirements
- Tool Control
- Health and Safety requirements
- Other internal trainings.

Local labor laws compliance, including authorization to work in the country where BG has its facilities, must be guaranteed by the supplier.

3. Warranty and Product Conformance

3.1 Supplier Warranty Obligations

Suppliers must provide a comprehensive warranty covering:

- Compliance with contractual specifications, ensuring all products and materials meet BG's engineering and technical performance standards, data sheet and legal requirements.
- Coverage for defects in materials, workmanship, and design, guaranteeing reliability throughout the specified warranty period.
- Clear return, repair, or replacement procedures, minimizing operational disruptions.
- Obligation to provide failure analysis reports on time, supporting root cause identification and corrective action implementation.
- The contractual warranty period is two (2) years from BG's acceptance date, unless otherwise stated in the contract, and covers free replacement or repair of the Supplies, including parts and labor.
 - The Supplier shall bear all associated costs, including return and reshipping charges.
 - The Supplier must replace or repair defective items within reasonable time, which is agreed between BG and the supplier. The supplier is responsible for taking all possible measures to avoid any disruptions and delays in the BG production.
 - If the Supplier fails to do so within the specified timeframe, BG may perform — or delegate — the necessary work at the Supplier's expense and risk.
 - Supplies that are replaced or repaired under warranty will carry a renewed warranty equal to the remaining duration of the original warranty period.
 - The Supplier shall remain liable for any losses incurred by BG or its customers resulting from noncompliant parts/materials supplied.
 - If any material or equipment carries a longer manufacturer warranty, such warranty shall prevail for that specific item.

3.1.1 Obsolescence Management

The Supplier's obsolescence management shall include processes and other resources necessary for delivery of the product:

- The supplier shall actively monitor the market and immediately notify BG, in writing, of any current and potential obsolescence issues. For obsolete product/part, the supplier shall, in writing, either propose a second source, or an alternative/similar product that performs the same function. If the supplier identifies that a redesign is required, the supplier shall also include an Engineering Change Request (see Chapter 6).

- BG must always be given the chance for a last buy/order of the original configuration before obsolescence is finalized.

3.2 Control of Nonconforming Outputs

A Product Quality Escape is to be understood as any product(s) that has been released by an internal/external supplier or sub-tier supplier, that is subsequently identified to be, or suspected to be, nonconforming to a BG product requirement that was applicable when the product was released. If the part/material is still in the Supplier's facilities, shipping to BG is not authorized unless BG provides a specific written waiver.

Suppliers must have a non-conformance process that complies to AS/EN/JISQ/KSQ 9100 or equivalent.

BG may issue a Supplier Corrective Action Request (SCAR) to the supplier to address quality defects. The supplier shall collaborate with BG to determine the division of responsibility for implementation of the Corrective Action and Preventive Action (CAPA) depending upon the nature of the quality problem and resolution.

Conditions such as the following may trigger a SCAR:

- Repeat failure
- Field failure
- Safety related failure
- Supplier not meeting delivery rating metric
- Supplier not meeting quality rating metric
- Product Quality escape
- Submission of nonconforming FAI

3.2.1 Non-Conformance Reporting

Suppliers must adhere to strict protocols for non-conformance reporting, including:

- Immediate notification of any detected deviations from contractual requirements – 24 hours window after detection to communicate to BG the defect, description and lots/batches affected.
- Submission of detailed non-conformance reports, including root cause analysis, containment actions, and corrective measures, using 8D methodology, compliant with the agreed due dates for the various steps.
- Collaboration in failure investigations, ensuring swift issue resolution.
- Compliance with BG's corrective action request process, tracking defect trends and quality improvements.

3.3 Corrective and Preventive Action Processes

To ensure continuous improvement, suppliers must implement:

- Corrective action plans based on root cause analysis to prevent recurrence of defects.
- Preventive strategies, identifying potential risks and mitigating them before they impact product and/or process performance.
- Regular audits and performance assessments, fostering proactive quality improvements.
- Documentation and tracking of corrective/preventive actions, ensuring traceability and compliance.

3.4 Items Repaired or Reworked

- Items returned to the supplier for repair or rework must be returned to new condition and all applicable requirements.
- Items determined to be No Fault Found (NFF), where supplier cannot validate rejection, require written authorization through the contract authority prior to returning the part.
- Two (2) or more NFFs or one (1) or more Dead On Arrival (DOA) on the same unit will be discarded for permanent non-acceptance at supplier's cost. The supplier is expected to initiate a continuous improvement project when experiencing multiple NFFs or DOAs on the same part number or family of parts.

3.4.1 Items reworked by the Supplier within BG's Facilities

Rejected item(s) by BG that are reworked by a supplier's representative within BG facilities, remain under the BG control.

When the rework is successfully completed, the supplier's representative will perform his buyoff. The supplier's representative buyoff will constitute the conformity statement for the rework. As a minimum, the supplier's representative buyoff text must include a statement that the rework was completed per engineering disposition.

3.5 Deviation Approvals

Under exceptional circumstances, BG may accept materials/products not fully compliant with the original BG specifications. This implies prior documented communication from the supplier for BG to evaluate and, if applicable, approve. The supplier must guarantee unambiguous identification of such goods to avoid confusion with regular goods.

4. Special Processes Qualification

A special process may be defined as a manufacturing or service process whose output cannot be fully verified by subsequent inspection or testing, and where the quality of the outcome depends on the process itself.

Examples of special processes include, but are not limited to:

- Heat treatment
- Welding
- Non-destructive testing (NDT)
- Chemical processing (e.g., plating, anodizing, passivation)
- Coating and painting
- Composite layup and bonding

4.1 Qualification and Approval of Special Processes

Because the results cannot be completely measured after the fact, suppliers must undergo a rigorous validation process for special processes, ensuring:

- Compliance with AS/EN/JISQ 9100 Clause 8.5.1.2, requiring documented process validation.
- Test and calibration laboratories must be ISO 17025 accredited, or explicitly qualified in coordination with BG.
- Process Failure Mode Effect Analysis (PFMEA) or similar risk assessment tool for risk assessment and defect prevention for special processes.
- Regular validation and testing, maintaining precision and repeatability in manufacturing.
- Variability analysis and reduction methods implementation, such as Statistical Process Control, for Key/Critical/Safety characteristics, to improve consistency.
 - Unless otherwise agreed, BG applies the following classification for special characteristics: Z (certification by laws), K (key), and P (significant) features.
 - For Z and K characteristics, either 100% inspection or a statistical capability (C_{pk}) ≥ 1.67 is required.
 - For P characteristics, the measured values must be explicitly stated in the Certificate of Conformance.

4.2 Certification Requirements for Personnel, Equipment, and Jigs & Tools

Suppliers must ensure that qualified personnel and calibrated equipment and controlled tools adhere to aerospace regulations:

- Personnel certifications, requiring documented training, qualification, and periodic re-certification, with regular competency assessments, ensuring operators remain proficient in special process execution, maintaining full traceability;
- Equipment and Jigs & Tools periodic calibration and validation, guaranteeing precision and consistency;
- Regular validation and testing, confirming operator competency and equipment functionality;

- Process capability studies, demonstrating consistent performance in controlled conditions;
- Have a documented process to guarantee the preservation, final integrity and quality of the equipment and tools at any time;
- Perform Machinery Failure Modes and Effects Analysis (MFMEA) when designing new/modifying existing machinery (equipment, jigs & tools);
- Ensure calibration control of equipment and tools which affect critical dimensions and values comply with, and are traceable to, recognized national or international standards;
- Equipment and Jigs & Tools identified to enable the calibration status to be determined;
- Guarantee sub-tier suppliers comply with all the listed requirements and always have the latest approved version of any applicable documents.

4.3 Control of Outsourced Special Processes

Strict oversight must be implemented when outsourcing special processes, including:

- Sub-Tier approval by BG team (changes of outsourced special processes require BG prior approval as well);
- Qualification of sub-tier suppliers, ensuring third-party vendors meet, as a minimum, the requirements listed in 4.1;
- Verification audits, evaluating documentation, process controls, and compliance records;
- Risk assessment models, identifying and mitigating supply chain vulnerabilities, to prevent supply chain disruptions and quality deviations;
- Traceability and accountability requirements, ensuring complete material and process documentation.

5. Deliveries, Packaging and Handling Requirements

5.1 Orders

- The Supplier must not begin work on the supplies without receiving a formal order. If the Supplier proceeds without such authorization, it does so entirely at its own risk and forfeits any right to claim compensation or damages should BG decide not to issue an order.
- Any modification, even minor, of the order is subject to the prior written agreement of BG.
- Delivery dates are specified in the order and are considered contractually binding. Suppliers must promptly inform BG of any circumstances that may risk timely delivery and must take all commercially reasonable measures to prevent or mitigate delay.

- Within eight (8) days of such notification, the Supplier shall submit a written communication detailing:
 - The updated status of the order
 - The cause of any anticipated delay, with supporting evidence
 - Actions taken or planned to prevent or minimize the delay
 - A proposed revised delivery date, if available
- BG will notify the Supplier of the penalty amount. If the Supplier does not contest the notification within 30 days, the stated amount will be offset against any payments due from BG to the Supplier.
- Early or partial deliveries are permitted only with BG's prior written approval.

5.2 Packaging Standards

Suppliers must adhere to strict aerospace packaging guidelines to ensure product integrity, compliance, and damage prevention, including:

- Use of anti-static, moisture-resistant, and vibration-dampening materials, protecting sensitive components.
- Adherence to AS9100 and, when applicable, MIL-STD packaging protocols, ensuring industry-standard protection.
- Controlled environments for packaging critical parts, preventing contamination or degradation.
- Shock-absorbing packaging for high-value components, mitigating risks of transit damage.

5.3 Documents Required with Shipment

Any pertinent documents related to a purchase order, including other contractual requirements (supplier purchase order to sub-tier, sub-tier Certificate of Conformance, test report and inspection report, etc.) must be kept on file and made available upon request, including:

- Address (Supplier's name and address);
- "Ship to" address;
- Purchase order number
- Part number shown on the purchase order;
- Shipment quantity;
- All serial numbers or quantities delivered (unit of measure per purchase order) by traceability number.

The supplier must provide two (2) copies of the shipping documentation, one (1) inside and one (1) outside the packaging of each shipment.

Any inspected, tested, repaired, rebuilt, altered or modified part or component must be returned to BG with the original documentation updated accordingly, including:

- A summary of work performed, including minor adjustments;
- A summary of the repairs;
- A list of replaced parts;
- Alteration performed;
- Tests performed;
- Approved documentation used (including maintenance manuals, service bulletins, approved drawings, etc.).

5.3.1 Certificate of Conformance

- The Supplier must provide a CoC stating the products, materials and/or parts conform to applicable drawings and/or specifications as required by the contractual requirements.
 - Only original documents are accepted, either signed or with a valid digital signature.
- The CoC must include additional required configuration identification, i.e. Part Number and Configuration status to which the delivered product and/or part was manufactured and the items listed below:
 - Supplier's name;
 - Supplier's address (matching the address in the applicable source approval documentation);
 - Purchase order number and revision;
 - BG engineering or supplier's part number as per purchase order requirements;
 - Quantity delivered by traceability number (must be exactly as identified on the part);
 - Statement specifying, where applicable, that the products and/or parts meet the flammability requirements;
 - Authorized Supplier's Quality personnel must sign the CoC (Quality stamp and initials are also acceptable - Electronic signature is acceptable providing the supplier has documented procedures to control the acceptance authority media).

Items required in the CoC if applicable or required in purchase order:

- Purchase Order item number (not applicable for BFE GS);
- Shelf-life expiry date
- Any deviation raised by supplier documented via NC or Request for Deviation/Waiver
- Serial number.

5.3.2 Limited Shelf-Life Items

For products with an expiration date, where, unless agreed otherwise on the Purchase Order, delivery must respect the 25% rule: 75% shelf-life minimum remain available starting from the delivery date.

5.4 Labelling and Transportation Guidelines

Proper identification and handling must be maintained throughout the supply chain, requiring:

- Standardized barcodes and QR codes, ensuring full traceability from supplier to end user.
- Compliance with international aerospace shipping regulations, meeting IATA and DOT standards.
- Tamper-proof seals, preventing unauthorized access or contamination of critical components.
- Clear handling instructions, specifying orientation, fragility, and environmental restrictions.

A formal "shipping release" check before dispatch is required.

5.5 Handling of Sensitive and Fragile Components

Suppliers must implement specialized handling procedures for delicate aerospace parts, including:

- Cleanroom packaging requirements, ensuring contamination-free transport of precision electronics.
- Temperature and humidity controls, preserving material integrity in sensitive components.
- Strict ESD protection must be applied wherever necessary to prevent electrostatic damage.
- Validated handling protocols, minimizing mechanical stress on fragile assemblies.
- Continuous inspection and damage tracking, ensuring defect-free delivery at each stage.

6. Specification Agreement and Change Management

6.1 Process for Specification Approvals

Suppliers must follow a rigorous approval process to ensure compliance with BG's standards. This includes:

- Formal specification review and validation, ensuring accuracy and alignment with engineering requirements.
- Documented approval from BG's Engineering team, confirming design and performance adherence.
- Verification through first article inspection (FAI), validating supplier capability to meet specification requirements.
- Ongoing specification verifications, ensuring long-term consistency and compliance.

Suppliers must inform BG of all changes types, not just engineering related. This includes, but is not limited to, Product, Process, Supplier, Material, Outsourcing, site relocation.

6.2 Notification and Approval of Changes

Suppliers must immediately notify BG of any proposed modifications to specifications, ensuring:

- Formal notification via engineering change request (ECR), detailing proposed alterations and a transition plan for parts already in production.
- Risk assessment and impact analysis, evaluating potential effects on quality, performance, and regulatory compliance.
- Formal approval from BG before implementation, preventing unauthorized modifications.
- Tracking specification history, maintaining full traceability of changes across development phases.
- Stakeholder communication protocols, ensuring all relevant parties are informed of specification updates.

6.3 Engineering Change Control and Documentation

To prevent uncontrolled modifications and ensure proper record-keeping, suppliers must:

- Maintain a structured engineering change management system.
- Implement a configuration control management system, preventing discrepancies in documentation and production.
- Track engineering changes using unique identification codes, ensuring traceability.
- Verify changes through controlled testing, confirming reliability and adherence to original requirements.
- The supplier must implement any technical revisions to specifications and other controlled manufacturing documents within six (6) months of the revision's publication date.
 - If the revised process is not executed within this period, full compliance with the revised requirement is mandatory upon its first application.
- Retain documented information of change processing and implementation for regulatory audits.

6.4 Prevention of Counterfeit Parts

BG enforces strict counterfeit prevention measures, requiring suppliers to:

- Source materials exclusively from authorized and approved vendors, preventing unauthorized substitutions.
- Maintain full traceability of components and materials, ensuring transparency in the supply chain.
- Implement serialization and batch tracking, verifying authenticity of supplied parts.

- Conduct risk-based assessments, identifying potential vulnerabilities in sourcing and supplier network integrity.
- Report suspected counterfeit incidents immediately (24 hours window after detection), ensuring rapid containment and mitigation.
- Compliance with aerospace anti-counterfeit regulations, including AS6174.

6.5 Change to Supplier's Organization

Supplier must promptly inform BG – both Quality & Procurement teams - of any organizational changes that affects:

- Manufacturing site location;
- Manufacturing processes;
- Quality Management System certification;
- Facility permits;
- Approved sub-tier suppliers;
- Enterprise Resource Planning (ERP) or Enterprise system;
- Any other changes affecting the supplier's scope of approval and/or approved qualification state.

The notification must include the following details;

- Description and rationale for the change;
- Planned date and incorporation point;
- Impact on Manufacturing, Quality and Logistics.

A formal change request (ECR) is mandatory.

7. Cybersecurity and Data Protection

7.1 Compliance with Cybersecurity and Data Protection Regulations

Suppliers must adhere to global cybersecurity compliance frameworks to safeguard sensitive data and prevent security breaches, including:

- GDPR compliance, ensuring proper handling of personal and sensitive data.
- CMMC 2.0 Level 1 (Cybersecurity Maturity Model Certification), securing defense-related supply chains (upon request, Level 2 might be needed).
- ISO 27001 best practices implementation, applying robust cybersecurity controls across supplier operations.
- Depending on project, other regulations might be applied.

7.2 Incidents communication

Any of the following incidents must be reported to BG immediately:

- Cyber incidents impacting BG and/or customer data, including, but not limited to: financial data,

personal data, product security or communication confidentiality, regardless of impacting or not the delivery of products/materials/services.

- Any cyber incidents which may spread to BG's information systems/network.
- Flaws and vulnerabilities, which could be found on the products and services delivered to BG.

To report any cybersecurity incidents, please contact cert@beyondgravity.com.

7.3 Secure Handling of Sensitive Data

Strict measures must be implemented to protect intellectual property and confidential aerospace information, including:

- Encryption protocols, ensuring data integrity and protection during transmission.
- Access control mechanisms, restricting data access to authorized personnel only.
- Inventory of supplier assets and personal data, to ensure their secure management.
- Secure storage solutions, utilizing hardened servers and cloud-based cybersecurity defenses.
- Regular security audits on systems and devices, ensuring ongoing compliance and vulnerability mitigation.
- Protect all systems and devices against malware and keep them up-to-date.

7.4 Physical and Environmental Security

Proper physical and environmental security measures must be implemented by BG's suppliers:

- Access control to their facilities to prevent unauthorized access, physical damage or theft of information and/or tangible belongings.
- Ensure that all users of your networks and devices have unique individual user identifier and use strong passwords.

7.5 Protection Against Cyber Threats in the Supply Chain

Suppliers must implement proactive cyber defense strategies to prevent external and internal cybersecurity risks, including:

- Threat detection systems, identifying and neutralizing cyber risks in real-time.
- Supplier cybersecurity vetting, ensuring sub-tier partners meet stringent security standards.
- Business continuity, with incident response plans, outlining procedures for cybersecurity breach containment and recovery.

- Continuous monitoring and threat intelligence, adapting to emerging cybersecurity challenges in aerospace supply chains.

8. First Article Inspection (FAI)

8.1 FAI Requirements

Suppliers must comply with the latest issue and revision of AS9102 First Article Inspection (FAI) protocols, ensuring:

- Verification of initial production runs, confirming conformity with design requirements.
- Inspection of key/critical/safety characteristics, ensuring materials, dimensions, and functionality meet specifications.
- Completion of the applicable forms, detailing part accountability, material conformity, and results reporting.
- Strict compliance with IAQG's AS9102 framework, ensuring industry-standard inspection accuracy.

Suppliers shall not ship production quantities until FAI is approved by BG.

8.2 Documentation and Reporting Standards

Proper FAI documentation must be maintained to validate production integrity, including:

- Structured reporting of inspection findings, ensuring transparent evaluation.
- Retention of FAI reports for regulatory review, ensuring long-term traceability.

8.3 Verification of Manufacturing Processes

To confirm consistency and reliability, suppliers's performance must be continuously monitored and must implement:

- Process validation through controlled trials, ensuring repeatability in manufacturing.
- Material certification and conformity checks, preventing deviations from approved specifications.
- Supplier calibration and measurement verification, ensuring accuracy.
- Inspection and test method validation, maintaining rigorous quality control across production cycles.

9. Material Compliance

9.1 Overview of REACH Regulations in Aerospace

Suppliers must comply with REACH (Registration, Evaluation, Authorisation, and Restriction of Chemicals) regulations, ensuring:

- Identification and documentation of chemical substances, aligning with European safety guidelines.
- Risk assessment for hazardous materials, preventing environmental and health hazards.
- REACH registration and reporting, ensuring regulatory transparency and compliance.
- Alignment with aerospace industry standards, including ESA's chemical management frameworks.

9.2 Supplier Responsibilities for Chemical Substance Management

Suppliers are responsible for maintaining strict chemical substance controls, including:

- Material Safety Data Sheet (MSDS) compliance, ensuring proper documentation and hazard identification.
- Continuous monitoring of substance usage, preventing unauthorized chemical integration.
- Regular supplier audits, ensuring adherence to REACH protocols and industry environmental standards.
- Implementation of hazardous material and responsible sourcing of minerals tracking systems, maintaining full visibility within the supply chain.

9.3 Substitution and Restriction of Hazardous Materials

To minimize environmental impact, suppliers must:

- Replace restricted substances with compliant alternatives, ensuring REACH-approved materials and RoHS compliance.
- Adhere to conflict minerals regulations, preventing unethical sourcing and ensuring supply chain integrity.
- Monitor global aerospace environmental regulations, maintaining compliance beyond EU standards.
- Implement sustainable material sourcing strategies, supporting long-term environmental responsibility.
- BG reserves the right to conduct a source inspection at the supplier's site and may assign a Quality representative at the supplier's facility at any point during the contract term.
 - When source inspection is required, the supplier must provide access to the facilities, equipment, inspection records, and any assistance needed to verify product or article compliance.

10. Supplier Performance and Monitoring

10.1 Performance Metrics and Audits

Suppliers will be evaluated based on critical performance indicators to ensure quality, reliability, and compliance to the defined requirements. Key metrics, at minimum, include:

- On-time delivery rate, tracking adherence to contractual deadlines.
- Product/service conformity and defect rate, ensuring non-conformance issues remain within acceptable limits.
- Corrective action response time, measuring efficiency in resolving quality concerns.

10.2 Continuous Improvement Expectations

BG requires suppliers to demonstrate proactive quality enhancement, emphasizing:

- Monitor, report and ensure supplier performances improvement (quality/deliveries).
- Lean manufacturing principles, optimizing efficiency and minimizing waste.
- Proactive defect prevention, reducing quality risks through predictive analysis – zero-defect strategy.
- Ongoing process refinement, incorporating new technologies and methodologies.
- Structured feedback loops, ensuring rapid identification and correction of performance issues.
- Employee training and skill development, ensuring consistency and expertise in production.
- Benchmarking against aerospace industry standards, maintaining competitiveness and compliance.
- Manage supply chain risks by performing supplier capacity or capability assessments.
 - Suppliers must consider and evaluate whether climate change is relevant for its operation and of its sub-tiers, and other interested parties and take actions accordingly.
- Long-term reliability assessments, evaluating sustained performance over time.

11. Acronyms

ASL	Approved Supplier List
BG	Beyond Gravity
CoC	Certificate of Conformance
DFARS	Defense FAR Supplement
ESA	European Space Agency
FAI	First Article Inspection
FAR	Federal Acquisition Regulation
FOD	Foreign Object Damage
MSDS	Material Safety Data Sheet
NADCAP	National Aerospace and Defense Contractors Accreditation Program
NC	Non conformance
QMS	Quality Management System
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RoHS	Restriction of Hazardous Substances
SCAR	Supplier Corrective Action Report