Standardizing Operator Variations in the Dangerous Goods Regulations

Background

When the forerunner of the IATA Dangerous Goods Regulations (DGR) was produced in the 1960s, the section governing State and Operator Variations was a modest 4 pages, covering a handful of notifications from 6 States and 9 operators. Today, that same section stretches to 120 pages (8% of the DGRs), encompassing more than 250 State variations and upwards of 1,250 operator variations from over 170 airlines, inadvertently introducing some challenges to users of the book.

For shippers, freight forwarders, and airline operations teams using the Dangerous Goods Regulations on a daily basis, the consequences are real: similar requirements are often expressed in different ways, entries which repeat existing prohibitions, variations appear to be identically worded but with an intentional nuance in the addition of one or two words; and distinctions between regulatory requirements and operational preferences have blurred.

Recognizing these issues, the State and Operator Variations Standardization Project was initiated to address concerns around the volume, consistency, and interpretation of State and operator variations. The objective was clear: simplify and standardize without compromising safety or regulatory intent.

The Project

The project was initiated by the IATA Dangerous Goods Board with a clear mandate: review the current state of variations, identify opportunities for simplification and harmonization, and develop a framework to manage variations more effectively in the future.

The remit was to cover the full spectrum of variations, with a particular focus on those that duplicate existing regulatory text; operator-centric internal procedures that ought to be managed through a company's operations manual; and untangling the difficulty in determining whether a variation was passenger-related, cargo-related, or both, which is creating confusion in a section primarily consulted by shippers, forwarders and ground handling staff as well as personnel involved in handling passengers.

The project's aims have been shared with a number of consultative bodies and views from a number of regulators and air operators reinforced the broad industry consensus that reform is necessary and welcomed.

Practical examples are;

Variations that duplicate regulatory text	Variations that are Operator-centric	Variations that mix passenger and cargo provisions
Shipments of UN 3171, Battery-powered vehicle, UN 3556 Vehicle, lithium ion battery powered, UN 3557 Vehicle, lithium metal battery powered, and UN 3558 Vehicle, sodium ion battery powered containing defective or damaged batteries are not accepted….	Carriage of carbon dioxide solid (dry ice) per aircraft shall be limited to the following: (a)1,500 kg on A330-200; (b)1,200 kg on B777-300ER/B777-200LR; (c)500 kg on B787-800; (d)200 kg on A319/A320/A321/B737-800.	Self-balancing vehicles (UN 3556 and UN 3557) are forbidden to be transported as cargo in passenger aircraft. These small lithium battery powered vehicles are also prohibited as carry-on or checked baggage. This prohibition applies but is not limited to air wheels, solo wheels, balance wheels and hover boards, among others—except if the vehicle is transported without batteries or is presented by the passenger as a mobility aid.

What has Already Been Achieved

Progress has been tangible. The standardization of many operator variations identified as suitable for harmonization has been completed. Rather than changing the substance or intent of any variation, the editorial amendments establish a consistent format, uniform cross-references, and a more standard structure. Airlines across the industry will find their variations now follow a common format, making it easier to interpret the operator variations for those who use the DGR on a regular basis.

The current 67th edition of the DGR reflects the initial standardization exercise. Hundreds of operator variations were editorially adjusted to align on structure and language addressing common categories such as restrictions on explosives, fissile material, airmail containing dangerous goods, salvage packagings, hazardous waste, chemical oxygen generators, and battery-powered vehicles. In each case, the meaning has been preserved, and the variety of different wording has been removed.

Beyond the text itself, IATA has developed and published an Operator Variation Request Form (dg_variation_form_template.docx) to be used by airlines submitting new or amended variations requests. The form is already in active use by airlines submitting their variations for next year's 68th edition of the DGR.

Prior to full implementation, we will be engaging in consultation with individual airlines regarding a more standardized structure to less common variations, applying a consistent format and incorporating unambiguous wording in a manner that enhances clarity and consistency, while preserving the original intent and regulatory meaning of the variations without introducing unintended impacts,.

The Dangerous Goods Variations (DGV) System: Building the Digital Foundation

Supporting the reform program is an IT initiative: the development of the DGV system, a single centralized platform designed to serve as the authoritative publishing source for all State and Operator Variations.

The intention is to no longer manage variations as static text across multiple publications, and language versions. Instead, the variations will be contained in a living repository that is used to populate all print and digital language versions of the Dangerous Goods Regulations, the Battery Shipping Regulations, the Infectious Substances Shipping Regulations, and other digital products including DG Digital and DG Autocheck.

The DGV is currently in its execution phase where the system is under development. Authoring within the new platform is expected to begin in September 2026.

IATA is also exploring a similar approach with State variations. For air operators, shippers and the entire supply chain, the prospect of consistency in the structure and format of State variations would help remove ambiguity, improve regulatory clarity and be developed and applied with an understanding of the impact on cargo supply chains.

Looking Ahead

In 2026, IATA will continue engaging directly with operators to secure concurrence on standardized variations and address any implementation considerations. This collaborative approach will ensure that changes are practical, widely accepted, and aligned with operational realities.

The rollout of the DGV system will mark a major milestone. With authoring expected to begin in September 2026, the platform will serve as the foundation for future publication and management of variations.

Further alignment with ICAO remains a key priority. Working toward a collaborative approach to State variations aims to reduce ambiguities in the interpretation of State variations, improve consistency across global regulatory frameworks and avoid unintended and adverse impacts in the global transport of dangerous goods.

Industry participation will continue to play a vital role. Operators, regulators, forwarders and ground handling agencies are encouraged to provide feedback that will lead to clearer, fit-for-purpose variations.

For further information about the State and Operator Variations Standardization Project, contact IATA's Dangerous Goods team at dangood@iata.org