



The Next Steps On Our Development Journey

By Yves Yemsi, Chief Operating Officer, and Will Hirst, Vice President Program Management

November 15, 2021

With the all electric Lilium Jet we are building a radically better way of moving – our innovative aircraft design can be a true game-changer. The development of a new commercial aircraft requires vision, but also meticulous planning and discipline. The task ahead is to ensure that we execute on the design, engineering, certification and manufacturing to successfully bring that product to market.

For an aircraft, development is unforgiving and there can be no compromise on safety.

We are designing our Lilium Jet on the principles of simplicity, manufacturability and scalability, and for the achievement of certification.

Our processes have been developed within a well-recognized regulatory framework. In 2017, we applied for Design Organization Approval (DOA), the regulatory approval required for organizations to design and certify new aircraft from the European Union Aviation Safety Agency (EASA). In parallel, we applied for a Production Organization Approval (POA) from the Luftfahrt-Bundesamt (LBA)- the national Civil Aviation Authority of Germany- to enable us to manufacture and produce aircraft at scale. Like DOA, POA is a fundamental requirement for all commercial aircraft manufacturers in Germany. We would expect DOA to be granted shortly before Type Certification, and DOA would enable us to receive POA, provided we have successfully met the requirements of these authorities.

Lilium is pursuing a cross validation between EASA and the US regulatory authority, the Federal Aviation Administration (FAA). In 2018, we applied for a concurrent Type Certificate validation of the Lilium Jet with the FAA, with EASA as our lead certifying authority. The certification basis (CRI-A01) was agreed with and issued by EASA in 2020. To ensure we receive concurrent certification with FAA as planned, we continue to pursue standard protocols and have been working closely on technical familiarization with FAA, in parallel with our primary discussions with EASA.

For operations of the Lilium Jet in Brazil, a validation of the EASA type certificate would have to be obtained from the national regulatory authority, Agência Nacional de Aviação Civil (ANAC), under the existing bilateral agreement between the European Union and Brazil and established Technical Implementation Procedure for EASA and ANAC coordination. While Lilium continues to advance the certification programs with EASA and the FAA, best practices from these programs could be leveraged during early engagement between Lilium and ANAC for the Type Certificate validation. We expect the Lilium Jet to be added onto an Azul Air Operator Certificate (AOC), and Lilium would pursue the necessary operational rulemaking activities jointly with ANAC and Azul.

To enable certification, we follow a structured aircraft Program Development Plan (PDP) with defined milestones called maturity gates. Based on the development plan, activities are synchronized across the Company. As we advance, we assess the program status at each maturity gate before moving on to the next stage. Disciplined program management significantly reduces the risk of major delays and disruptions further down the line.

Key Dimensions of Performance for the Lilium Jet

In any commercial aerospace program, there is a core set of attributes relating to the aircraft's performance, operations and economics. These attributes are continually monitored because they are important to the success of the Development Program.

For our aircraft program, these include:

- Compliance to regulatory requirements
- Payload
- Cruise & Maximum Speed
- Maximum Range
- Operational Capabilities (e.g. Visual Flight Rules, Instrument Flight Rules)
- Charge Time
- Noise during takeoff
- Recurring cost
- Annual operating cost
- Program & production cost
- Adherence to Program Schedule

There are of course, many other attributes that need to be addressed thoughtfully in order for an aircraft program to be successful. The set above is deliberately shortened to emphasize those aspects we believe are important in a regional eVTOL aircraft development Program.

Program Maturity Gates

In the following outline, we describe the most important current and future maturity gates and their significance for the Lilium Jet development program. Our key gates on the route to certification and entry into service (EIS) can essentially be summarized as follows:

1. Prior to Preliminary Design Review (PDR)
2. Preliminary Design Review (PDR)
3. Critical Design Review (CDR)
4. Production Start
5. Ground Test & First Flight of Conforming Aircraft
6. Type Certificate & EIS



Illustrative

Prior to Preliminary Design Review (PDR)

As of today, and before reaching preliminary design review (PDR), the Lilium Jet program has already gone through a number of maturity gates, in particular the aircraft architecture review (AAR) and the program readiness review (PRR). These gates have enabled us to verify that the technologies we need to build the Lilium Jet will be available at sufficient maturity. At Lilium, we measure both the maturity of a particular technology, technology readiness level (TRL), and the capability to manufacture that technology, manufacturing readiness level (MRL). When starting a product development program, selecting a technology with a higher TRL means less engineering effort and reduced risk during the product development phase than a technology with a low TRL. This can reduce development time and cost. Lilium therefore seeks to use technologies already at the required TRL or with a high-confidence path to get there.

Preliminary Design Review (PDR)

The preliminary design review (PDR) is an important maturity gate that we entered in November 2021. During PDR, we seek to gain sufficient confidence that the aircraft architecture will (a) meet airworthiness requirements, (b) deliver the performance and operational requirements assumed in our business cases, and (c) be produced at the appropriate quality. PDR consists of a series of technical reviews feeding into program reviews. Performing a rigorous PDR enables us to identify at an early stage in the development program some specific areas which might require further preliminary design work. Not only internal teams and leadership are involved, but also senior independent aerospace experts participate in the reviews.

PDR is important in terms of preparing the strategic industrial basis of the program, confirming that the main suppliers for flying items as well as for production equipment, jigs and tools have been identified, long-lead items launched, and make-or-buy strategies are defined. PDR also helps us to further refine program cost estimates. Completion of PDR gives the green light for engineering to launch detailed design activities and for procurement to ramp up supplier contracting activities and start making more significant financial commitments to existing suppliers.

Critical Design Review (CDR)

Going from PDR to CDR means locking in the detailed design ahead of first production for most aircraft components, making key technical trade-off decisions and understanding how these will impact the key attributes of the aircraft program, such as timeline, cost, performance and weight. At its most simple level, it translates into releasing drawings for production.

CDR typically takes a bottom-up approach. Once key components have passed their CDR, we conduct the CDR at system, and then at aircraft level.

CDR demonstrates that the design is mature enough to be manufactured, assembled, integrated and tested with Type Certification as a goal. It also establishes whether the intended requirements will be met within targeted cost and timelines in order to achieve financial forecasts and business case estimates.

Following a component's CDR, we will release the detailed design, upon which our internal teams and external suppliers will start building the first set of Conforming Aircraft.

When we reach this maturity gate at aircraft level, we seek to confirm that initial production equipment is installed and commissioned, production personnel are trained, and the logistics systems are operational.

Production Start

After CDR, the program fully enters its industrialization phase, with suppliers producing components according to detailed design data and qualified production processes, and Lilium assembling these components to build the first set of Conforming Aircraft.

Although the Start of Production is not a technical maturity gate, it marks a significant milestone. After many years of working on technology demonstrator aircraft and computer-generated digital mock-ups, the structure of the first conforming aircraft, with fully engineered fuselage, wings and canards, takes shape on the final assembly line.

Lilium's Conforming Aircraft will be manufactured under the processes documented in our application with LBA for the POA, utilizing the relevant quality management system and using conforming materials and design data approved for the purpose of manufacturing a conforming prototype.

When the first production aircraft finally emerges, it is a significant accomplishment for all involved, providing an emotional boost for the organization and sending an important signal to partners of the Company.

Once the Conforming Aircraft is assembled, it is transferred from manufacturing back to engineering to start the ground testing campaign.

Ground Test Campaign & First Flight of a Conforming Aircraft

Although technology demonstrators, such as those already flown by Lilium, may look similar to the Conforming Aircraft, for testing and certification purposes they are distinct. For Type Certification, the entire ground and flight-testing campaign requires the use of an aircraft that conforms to applicable design data and is in a controlled configuration.

Lilium will validate that the test aircraft configuration conforms to applicable design data and requirements, and we will collaborate with EASA for approval of flight conditions. Ground Testing will be completed on individual component test benches, large integrated system test rigs representing the full aircraft configuration, and the test aircraft itself.

The approved flight conditions and associated data will then be used by the applicable aviation authority of the country or region which issues the permit to fly. In the case of Lilium, this will be the German authority, Luftfahrt-Bundesamt (LBA).

The first flight of our Conforming Aircraft will mark a key milestone for Lilium

The start of the Conforming Aircraft test campaign represents a strong vote of confidence in the design and production organizations and paves the way for certification and EIS. At this point in time, partners and customers can see that the production aircraft will soon be delivered and commercial arrangements are finalized to prioritize customer production slots.

Type Certificate and EIS

We expect to use a number of conforming aircraft for our flight test campaign so that we can test specific configurations of the aircraft and perform multiple flight tests in parallel. This campaign for compliance demonstration will continue until our Lilium Jet receives its Type Certification. Once the certification criteria are met, EASA and subsequently the FAA would issue type-certificates for the aircraft against their applicable certification bases. Before welcoming our first passengers on board, operations of the Lilium Jet will need to comply with continuing airworthiness and operational requirements such as flight operations and crew training. Therefore, we anticipate the Lilium Jet will be operated by a fully-fledged airline in possession of an Air Operator Certificate (AOC). Regulators will review the end-to-end passenger experience and safety of the aircraft before granting an AOC for operation of the Lilium Jet. This is in line with current practices for commercial airline operators. Given the similarity of planned operations of the Lilium Jet to existing services, a close to comprehensive set of operating rules already exists.

Type Certification and EIS is where the initial development program reaches the finishing line, and a revenue-generating business can begin. Type Certification is the regulatory confirmation that the aircraft is safe for operation and can be operated commercially.

Beyond Type Certification, our teams will maintain continuous development activities aimed at improving the performance of the Lilium Jet, on critical dimensions such as customer satisfaction, business revenue generation and operational maintenance. Lilium and its supplier partners will also focus on production ramp-up activities involving Lilium and its supply chain, in order to ensure deliveries to Lilium are sufficient to meet market demand. And so the journey continues.

About Lilium

Lilium (NASDAQ: LILM) is creating a sustainable and accessible mode of high-speed, regional transportation for people and goods. Using the Lilium Jet, an all-electric vertical take-off and landing jet, offering leading capacity, low noise and high performance with zero operating emissions, Lilium is accelerating the decarbonization of air travel. Working with aerospace, technology and infrastructure leaders, and with planned launch networks announced in Germany, the United States and Brazil, commercial operations are projected to begin in 2024. Lilium's 700+ strong team includes approximately 400 aerospace engineers and a leadership team responsible for delivering some of the most successful aircraft in aviation history. Founded in 2015, Lilium's headquarters and manufacturing facilities are in Munich, Germany, with teams based across Europe and the U.S. To learn more, visit www.lilium.com.

Forward Looking Statements

This communication contains certain forward-looking statements within the meaning of the federal securities laws, including, but not limited to, statements regarding Lilium N.V.'s proposed business and business model, the markets and industry in which Lilium N.V. and its subsidiaries (collectively, the "Lilium Group") operate or intend to operate, the anticipated timing of the commercialization and launch of the Lilium Group's business in phases and the expected results of the Lilium Group's business and business model, including when launched in phases. These forward-looking statements generally are identified by the words "believe," "project," "expect," "anticipate," "estimate," "intend," "strategy," "future," "opportunity," "plan," "may," "should," "will," "would," "will be," "will continue," "will likely result," and similar expressions. Such statements are based on management's belief or interpretation of information currently available. Forward-looking statements are predictions, projections and other statements about future events that are based on management's current expectations with respect to future events and are based on assumptions and subject to risk and uncertainties and subject to change at any time. The Lilium Group operates and will continue to operate in a rapidly changing emerging industry. New risks emerge every day. Given these risks and uncertainties, you should not rely on or place undue reliance on these forward-looking statements. Actual events or results may differ materially from those contained in the projections or forward-looking statements.

Many factors could cause actual future events to differ materially from the forward-looking statements in this communication, including, but not limited to, the following risks: (i) the impact of COVID-19 on the Lilium Group's business; (ii) the Lilium Group's ability to implement its business plans, operating models, forecasts and other expectations and identify and realize additional business opportunities; (iii) the Lilium Group's and its partners' inability to achieve anticipated specifications for the Lilium jet and any related infrastructure; (iv) general economic

downturns or general systematic changes to the industry in which the Lilium Group will operate, including a negative safety incident involving one of the Lilium Group's competitors that results in decreased demand for the Lilium Group's jets or services; (v) the failure of the Lilium Group and its current and future business partners to successfully develop and commercialize the Lilium Group's business or significant delays in its ability to do so; (vi) the Lilium Group may never achieve or sustain profitability; (vii) the Lilium Group will need to raise additional capital to execute its business plan, which may not be available on acceptable terms or at all; (viii) the Lilium Group may experience difficulties in managing its growth, moving between development phases or expanding its operations; (ix) third-party suppliers, component manufacturers or service provider partners are not able to fully and timely meet their obligations or deliver the high-level customer service that the Lilium Group's customers will expect, and impacts from disruptions in the Lilium Group's supply chains due to the COVID-19 pandemic, inflationary pressures or otherwise; (x) the Lilium Group's jets not performing as expected, delays in producing the Lilium Group's jets or delays in seeking full certification of all aspects of the Lilium Group's jets, causing overall delays in the anticipated time frame for the Lilium Group's commercialization and launch; (xi) the technology necessary to successfully operate the Lilium Group's jets and business operations is delayed, unavailable, not available at commercially anticipated prices, not sufficiently tested, not certified for passenger use or otherwise unavailable to the Lilium Group based on its current expectations and anticipated needs; (xii) product liability lawsuits, civil or damages claims or regulatory proceedings relating to the Lilium Group's jets, technology, intellectual property or services; (xiii) the Lilium Group's inability to secure or protect its intellectual property; (xiv) any failure of the Lilium Group to agree upon final commercial terms or fail to finalize and enter into definitive documentation relating to any anticipated commercial transactions or strategic alliances with its prospective partners and suppliers; and (xv) that the final terms of any commercial transaction or strategic alliance with Lilium's prospective partners and suppliers may differ, including materially, from the terms currently anticipated. The foregoing list of factors is not exhaustive. Forward-looking statements speak only as of the date they are made. You are cautioned not to put undue reliance on forward-looking statements, and the Lilium Group assumes no obligation to, and does not intend to, update or revise these forward-looking statements, whether as a result of new information, future events, or otherwise. The Lilium Group is not giving you any assurance that it will achieve its expectations. A further list and description of risks, uncertainties and other matters can be found in the section titled "Risk Factors" in our filings with the U.S. Securities and Exchange Commission, all of which are available at www.sec.gov. All forward-looking statements attributable to the Lilium Group or any person acting on its behalf are expressly qualified in their entirety by this cautionary statement.