Deutsche Lufthansa AG
Federal Republic of Germany, Airlines

Key metrics

			Scope estimates	
Scope credit ratios	2021	2022	2023E	2024E
Scope-adjusted EBITDA/interest cover	Negative	10.4x	10.0x	12.9x
Scope-adjusted debt/EBITDA	Negative	2.1x	1.6x	1.2x
Scope-adjusted funds from operations/debt	-4%	38%	51%	67%
Scope-adjusted free operating cash flow/debt	-7%	32%	10%	9%

Rating rationale

The Positive Outlook reflects the expectation of strengthening credit metrics over the next years, driven by the pace of recovery in air traffic and supported by recently reported results. All core business segments are on a good track. Rising passenger airlines revenues, a resilient cargo business and the contribution from the maintenance, repair and overhaul activities will ensure growth.

The business risk profile (assessed at BBB-) continues to be supported by the group's well-diversified portfolio and the individual business segments' strengths. The group's leading position in its home markets allowed passenger revenues to recover in 2022 as demand rose in both leisure and business travel, with passenger airline capacity recovering to an average of 72% of its pre-crisis level. Profitability has been improving as yields continue to increase across all traffic regions. Unit costs are trending closer to 2019 levels, helped by cost savings, while higher capacity is helping to leverage fixed costs.

The financial risk profile has improved to BBB from BB+, based on improving credit metrics amid better cash generation that has allowed a further reduction in indebtedness. The Scope-adjusted debt/EBITDA leverage ratio fell below 2.5x in FY 2022. Based on forecasted improved bookings, Scope expects the leverage ratio to further improve in FY 2023.

Outlook and rating-change drivers

The Outlook is Positive and incorporates our expectation of an improving financial risk profile, exemplified by a Scope-adjusted debt/EBITDA moving towards 2.0x.

A rating upgrade could be warranted if industry and business conditions continued to improve, resulting in a significantly higher operating cash flow and an improved financial risk profile, exemplified by a Scope-adjusted debt/EBITDA sustained at below 2.0x.

Scope could revise the Outlook back to Stable, if Scope-adjusted debt/EBITDA were to remain above 2.0x on a sustained level. This could be triggered by a sudden and unexpected negative change in discretionary travel (business and leisure) due to shifts in the macroeconomic environment, lower business confidence or event risks.

Rating history

Date	Rating action/monitoring review	Issuer rating & Outlook
24 May 2023	Outlook change	BBB-/Positive
16 Sep 2022	Affirmation	BBB-/Stable
11 July 2022	Outlook change	BBB-/Stable
8 July 2021	Affirmation	BBB-/Negative

Ratings & Outlook

Issuer	BBB-/Positive
Short-term debt	S-2
Senior unsecured debt	BBB-
Subordinated hybrid debt	BB

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Related Methodology and Related Research

General Corporate Rating Methodology; July 2022

ESG considerations for the credit ratings of airlines, August 2022

European airlines: fuel prices, rising staff costs threaten profit margins despite traffic rebound, July 2022

Credit Talk: Europe's airline sector faces tough financing, operating conditions; May 2022

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Positive rating drivers	Negative rating drivers
• Globally diversified operations with strong market positions mitigating cyclicality risks in passenger and cargo traffic • Scale of operations, including diversified worldwide route network and geographical reach, with strong positions at hubs in Frankfurt, Munich, Zurich, Brussels and Vienna • Broad fleet of aircraft • Co-founder of customer loyalty programme Star Alliance, supporting increased flight frequencies • Operational rebound and recovery following restructuring	• Exposure to cyclical changes in discretionary travel (business and leisure) and event risks such as natural disasters, contagious diseases and labour strikes, which negatively affect passenger volumes • Multi-hub strategy with low flexibility to adjust capacity without affecting the whole system • Fierce competition, including yield pressure from low-cost and network airlines • Relatively weak profitability due to high fuel and employee costs • Macroeconomic challenges impacting costs

Positive rating-change drivers	Negative rating-change drivers
• Industry and business conditions continuing to improve • Scope-adjusted debt/EBITDA sustained below 2.0x	• Further travel restrictions leading to deterioration of air traffic • Scope-adjusted debt/EBITDA remaining above 2.0x

Corporate profile

Deutsche Lufthansa AG (Lufthansa or Lufthansa Group) is a global aviation group organised into the following business segments: Passengers Airlines (Lufthansa German Airlines, Swiss, Brussels Airlines, Austrian Airlines as well as Eurowings,), and Aviation Services. Aviation Services comprises the segments Logistics (Lufthansa Technik), maintenance, repair and overhaul (MRO), Catering (LSG) and Additional Businesses and Group Functions. The latter also includes Lufthansa AirPlus, Lufthansa Aviation Training, and the IT companies. All segments occupy a leading position in their respective markets. Deutsche Lufthansa AG, commonly shortened to Lufthansa, is the flag carrier of Germany.

Financial overview

				Scope estimates		
Scope credit ratios	**2020**	**2021**	**2022**	**2023E**	**2024E**	**2025E**
Scope-adjusted EBITDA/interest cover	Negative	Negative	10.4x	10x	12.9x	14.9x
Scope-adjusted debt/EBITDA	Negative	Negative	2.1x	1.6x	1.2x	1.0x
Scope-adjusted funds from operations/debt	-25%	-4%	38%	51%	67%	80%
Scope-adjusted free operating cash flow/debt	-34%	-7%	32%	10%	9%	7%
Scope-adjusted EBITDA in EUR m						
EBITDA	-2,700	33	3,710	4,196	4,844	5,202
Changes in provisions[1]	-338	-210	-351	0	0	0
Scope-adjusted EBITDA	**-3,038**	**-177**	**3,359**	**4,196**	**4,844**	**5,202**
Funds from operations in EUR m						
Scope-adjusted EBITDA	-3,038	-177	3,359	4,196	4,844	5,202
less: (net) cash interest paid	-157	-275	-322	-367	-323	-296
less: cash tax paid per cash flow statement	81	-101	-288	-403	-476	-523
less: pension interest	-97	-78	-83	-85	-85	-85
add: dividends from associates	57	27	70	50	50	50
Funds from operations	**-3,154**	**-604**	**2,736**	**3,390**	**4,009**	**4,348**
Free operating cash flow in EUR m						
Funds from operations	-3,154	-604	2,736	3,390	4,009	4,348
Working capital change	-683	1,347	1,694	348	85	50
Non-operating cash flow	762	-177	580	0	0	0
less: capital expenditure (net)	-807	-1,107	-2,354	-2,600	-3,000	-3,400
less: lease amortisation	-379	-354	-381	-441	-528	-594
Free operating cash flow	**-4,261**	**-895**	**2,275**	**697**	**566**	**404**
Net cash interest paid in EUR m						
Net cash interest per cash flow statement	237	363	253	347	303	276
add: interest expense pension	97	78	83	85	85	85
less: interest hybrid debt	-13	-13	-13	-13	-13	-13
Net cash interest paid	**321**	**428**	**323**	**419**	**375**	**348**
Scope-adjusted debt in EUR m						
Reported gross financial debt	15,368	16,670	15,151	14,270	12,939	12,477
less: subordinated (hybrid) debt	-250	-250	-250	-250	-250	-250
less: cash and cash equivalents	-5,460	-4,666	-8,301	-8,578	-7,998	-8,126
add: non-accessible cash	61	100	100	100	100	100
add: pension adjustment	3,034	1,759	415	1,250	1,300	1,350
add: other bank borrowing	14	19	21	0	0	0
Less: fair value hedges	-112	-154	63	-100	-100	-100
Scope-adjusted debt	**12,655**	**13,478**	**7,199**	**6,692**	**5,991**	**5,451**

[1] There has been an adjustment to the calculation of Scope-adjusted EBITDA in line with the update corporate methodology.

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Environmental, social and governance (ESG) profile[2]

Environment		Social		Governance	
Resource management (e.g. raw materials consumption, carbon emissions, fuel efficiency)	Red leaf	Labour management	Red leaf	Management and supervision (supervisory boards and key person risk)	Grey leaf
Efficiencies (e.g. in production)		Health and safety (e.g. staff and customers)		Clarity and transparency (clarity, quality and timeliness of financial disclosures, ability to communicate)	Grey leaf
Product innovation (e.g. transition costs, substitution of products and services, green buildings, clean technology, renewables)		Clients and supply chain (geographical/product diversification)		Corporate structure (complexity)	Grey leaf
Physical risks (e.g. business/asset vulnerability, diversification)		Regulatory and reputational risks		Stakeholder management (shareholder payouts and respect for creditor interests)	Grey leaf

Legend

Green leaf (ESG factor: credit positive)

Red leaf (ESG factor: credit negative)

Grey leaf (ESG factor: credit neutral)

Two ESG factors affecting the airlines industry

Lufthansa Group like many airlines has an ESG strategy addressing different challenges. The two key risks in the overall airline industry relate to:

i) CO2 emissions: The EU is targeting net zero emissions by 2050 and airlines need to reduce their carbon footprint accordingly. Available means are fleet renewal (new technologies emit less), route optimisation with the help of airport operators and air traffic control, and the use of sustainable aviation fuel (similar to conventional jet fuel but smaller carbon footprint).

ii) Labour management: Labour relations are challenging, with an increasing risk of strikes. These have been compounded by:

- The need to navigate different labour laws across multiple countries.
- Labour taking up a large proportion of total costs. The low-margin airline industry will always seek to lower these costs and unions will always resist.
- The tightening supply of pilots that has strengthened union bargaining power.
- Labour unrest caused by the aftermath of the Covid-19 pandemic and rising inflation.

[2] These evaluations are not mutually exclusive or exhaustive as ESG factors may overlap and evolve over time. We only consider ESG factors that are credit-relevant, i.e. those that have a discernible, material impact on the rated entity's cash flow and, by extension, its credit quality.

Business risk profile: BBB-

Industry risk profile: B

We classify the cyclicality for the airline industry as high due to its susceptibility to adverse economic changes and event risks. Market entry barriers are low, with many market players despite the complex regulatory and legal standards. Substitution risk is low as technological progress is unlikely to change air travel.

Global leader in different segments

Lufthansa is among the largest network carriers worldwide as measured by revenue passenger kilometres. The group has several companies that are global leaders in their respective sectors. To secure and build on its successful positioning, Lufthansa group has been adapting its business models to the changing markets and competitive environments.

Leading position at major hubs

The group's leading market position in its home markets has allowed passenger airlines revenues to gradually recover from the pandemic in line with the rising demand in both leisure and business travel.

Lufthansa continues to play an active role in market consolidation, also through opportunistic transactions. Any capacity reduction from faster market consolidation would enable Lufthansa to expand market share and increase yields. In this context, the potential purchase of a stake in ITA Airways will strengthen the group's position in Italy, its second most important foreign market after the United States.

Lufthansa's restructuring and modernisation has allowed it to adapt to the increasing demand and take advantage of growth opportunities. However, the pace of a recovery in aviation still depends on alleviating capacity constraints in the value chain as well as the recovery of the Asian and premium markets. The post-pandemic recovery is still being led by intra-European and transatlantic traffic. The Star Alliance joint venture and network on transatlantic routes continues to provide a vast network and product range. As of 2022, flights to Africa and the Middle East already exceeded 90% of the pre-crisis volume while flights to the American continent recovered to around 75% of its pre-crisis level. Asia is the only exception as a result of China's long strict zero-Covid policy and the slow opening of the Japanese market; at the end of 2022, on average 72% of the pre-crisis capacity was reached. For 2023, Lufthansa is assuming it will recover to 85%-90% of its 2019 capacity and over 95% in 2024. For 2024, Lufthansa also expects to recover to around 80% of the 2019 business travel volume.

The broad fleet of aircraft and good position in long-haul premium traffic further bolster Lufthansa's competitive position.

Cargo was a vital revenue source when passenger flights were grounded

Lufthansa Cargo is among the top cargo airlines worldwide as measured by revenue tonne kilometres. Lufthansa Cargo continues to benefit from strong demand for airfreighting. During the Covid-19 pandemic, freight capacity did reduce on account of the loss of capacity from grounded passenger aircraft. The global airfreight market also declined slightly in the 2022 financial year but remained high in historical terms. Yields started to normalise in mid-2022 while demand is also recovering after congestion in sea freight eased and the economy started to recover. Higher passenger volume and the related increase in belly freight capacity also contributed.

Lufthansa Technik: a leading independent MRO provider for civil commercial aircraft

In a fragmented global market, Lufthansa Technik is one of the largest MRO providers for aircraft, engines and aircraft components. Lufthansa Technik's market strength is reflected in the large number of aircraft served (4,000) under exclusive contracts. We also expect the MRO industry to continue to grow, supported by increases in commercial aircraft deliveries and air traffic. MRO is contributing less and less to group earnings, given the growing share from the passenger business, but the more stable MRO business remains positive for Lufthansa's overall business risk. Lufthansa Technik will continue to perform strongly as more aircrafts are deployed to meet the rising demand.

Lufthansa's increasing focus on the core airline business, with plans to exit the non-core areas of catering (LSG) and business travel management solution (Air Plus).

In 2023, the remainder of LSG Group will be sold to Aurelius as part of Lufthansa's strategic re-orientation. The remaining activities are in the Americas and the Asia-Pacific, where Lufthansa Group Airlines is not among the largest customers. The transaction is expected to be completed in Q3 2023 and Catering will cease to be a business line. Lufthansa plans to divest AirPlus but only when the fair value can be realised.

Diversification supports competitive position

Lufthansa's diversification supports its business risk profile. The network of destinations in Passenger Airlines is broad in addition to the complementary portfolio of companies. Diversification into other activities, especially cargo, has helped to offset the impact of reduced passenger traffic. Group revenues are naturally more skewed towards Europe, given the major hubs in the region, but business outside Europe adds to geographic diversification. In 2021 and 2022, the strong performance of Lufthansa Cargo and Lufthansa Technik counteracted the weaker performance in Passenger Airlines. Lufthansa is also aiming for internationalisation, targeting the acquisition of ITA Airways along with its long-haul network as well as expanding the premium offering of Lufthansa and Swiss airline.

However, the growth of the aviation sector remains highly dependent on the global political situation and correlates with the macroeconomic development. Structural changes in demand in connection with the coronavirus pandemic, the war in Ukraine, infrastructure limitations, the effect of the climate crisis and continued digitalisation mean that long-term market growth is expected to be lower than in the past.

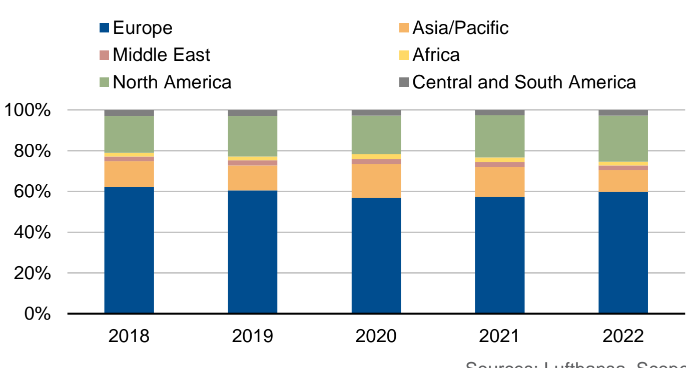
Lufthansa's profitability to recover gradually

Improving unit costs following the restructuring

Lufthansa's profitability remains a weakness in its business risk profile. The EBITDA margin was below peers' but this gap narrowed in 2019 following structural cost improvements. Along with most other airlines, Lufthansa's revenues took a hit in 2020-2021 due to the pandemic, leading to a net loss. The group quickly cut costs, specifically fixed costs, to stem the cash drain. Lufthansa returned to profitability in 2022 as all main business segments recorded profits. The group's first post-crisis objective is to improve EBIT. This will depend on air traffic recovery combined with an increase in structural profitability through lower unit costs, simpler processes and structures, and higher productivity. The reduction in the cost base will affect all group activities. However, controlling labour costs remains a challenge given their significant share of total costs. The fast rise in fuel prices also cannot be fully offset by measures including hedging. Therefore, ticket prices will have to rise. Management expects to progress quickly towards 2024 profit targets, expecting adjusted EBIT to increase significantly in 2023 on a YoY basis. This profit guidance is based on profits in Passenger Airlines that are expected more than offset the decline at Lufthansa Cargo, combined with a similar profit as in 2022 forecast for MRO. Scope expects stable unit costs in 2023 despite inflation due to higher capacity utilisation and costs savings. For 2024, the unit cost decline will decline, be driven by capacity expansion to almost 2019 levels, higher crew and aircraft productivity, and efficiency gains from fleet renewals and the standardisation of processes and systems, though partly offset by inflation. By 2024, annual costs should structurally be around EUR 3.5bn lower than before the crisis. The group is targeting an EBIT margin of at least 8% by 2024, and achieving this will further support Scope's profitability assessment.

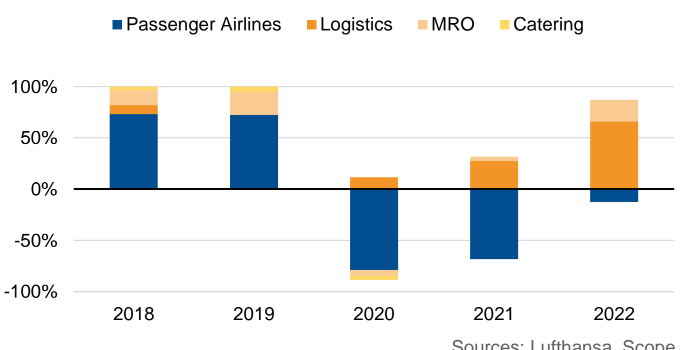
Despite the resilient market share and improving profitability, the business risk profile is limited by the risks of cyclical changes to discretionary travel that may result from event risks (such as the pandemic) and the fiercely competitive environment.

Figure 1: Lufthansa geographical split of revenues



Sources: Lufthansa, Scope

Figure 2: Lufthansa share of business segment results (adjusted EBIT) over time



Sources: Lufthansa, Scope

Financial risk profile: from BB+ to BBB

Credit metrics improving with the traffic recovery

The financial risk profile has improved to BBB from BB+ following the improvement in key credit metrics. Increased demand and cost savings have improved cash generation and lowered indebtedness.

Lufthansa's results in the recent years have reflected the Covid-19 impact on global aviation traffic. In 2020, group revenue declined by more than 60% and EBITDA fell deep in the red. In 2021, revenue was 24% more than in 2020 but 54% lower than in 2019 and EBITDA was breakeven. While in 2022, revenues were 10% below 2019 levels while EBITDA surpassed EUR 3bn reflecting a recovery.

Before the pandemic, Lufthansa was already restructuring across all operating functions to reduce fixed costs sustainably. With global aviation traffic unlikely to regain pre-Covid levels until 2024, Lufthansa's financial outlook and cash generation will instead depend on shrinking its overall capacity while adapting to the post-pandemic environment. Net debt rose significantly during the pandemic due to lost revenues and the raised debts. The group introduced some countermeasures to lower indebtedness. Strict liquidity management and financing measures, particularly the capital increase in October 2021, led to state-guaranteed loans being repaid much earlier. However, a quick deleveraging required a strong cash flows and higher operating results. Credit metrics started normalising since 2022 and continue to improve towards pre-Covid levels. Increasing bookings and cash flow have allowed further deleveraging. Lufthansa achieved its net debt/EBITDA target of 3.5x earlier than expected, with 2.3x in 2022 based on Lufthansa's calculations. This was a result of a release of pent-up passenger demand that drove yields higher, disciplined capacity expansion and continued restructuring. The Scope-adjusted debt/EBITDA leverage ratio went below 2.5x in 2022 and is expected to reach below 2.0x going forward. The same applies to Scope-adjusted debt funds from operations/debt, which improved to 38% in 2022 and is expected to reach above 50% going forward. Likewise, debt protection as measured by Scope-adjusted EBITDA/interest cover will likely remain strong at around 10x, supported by Lufthansa's increased use of cheaper financing in the high interest rate environment (such as the use of JOLCO aircraft financing instead of bonds). The interest rates rise is also causing the pension deficit to reduce thanks to the higher discount rate for pension liabilities, which combined with strong cash flow, will help to strengthen the balance sheet even further. The group is also aiming to keep reducing costs until 2024. At end-2022, over 90% of the measures had been implemented, sustainably reducing annual costs by around EUR 3.2bn.

In 2022, free operating cash flow benefited in particular from the strong increase in bookings and related advance payments as well as improvements to working capital. However, free operating cash flow may remain weaker going forward as capital expenditure

will be around EUR 2.5bn to EUR 3bn annually due to fleet renewal and operational ramp-up.

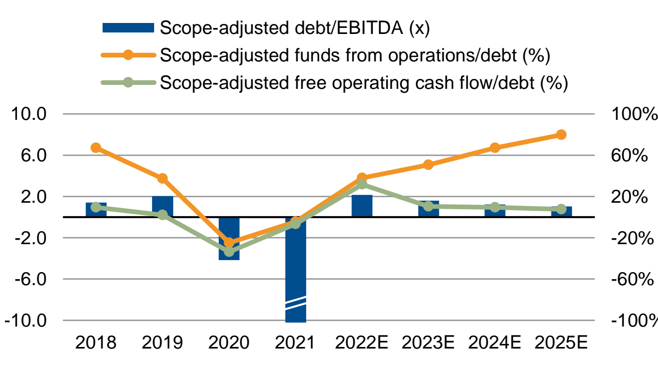
The rating case assumes no material impact from the upcoming divestment of non-core assets (LSG rest of the world and AirPlus), the potential disposal of the minority stake in Lufthansa Technik, and the potential purchase of a stake in ITA Airways, all which may take place in 2023.

Adequate liquidity

Lufthansa's liquidity is adequate. Strong operating cash flow led to an increased liquidity position. As of 31 December 2022, Deutsche Lufthansa AG had available liquidity of EUR 8.3bn. Liquidity benefits from EUR 2.1bn in undrawn revolving credit lines and a more than 85% unencumbered fleet. Altogether, available liquidity can more than cover the EUR 1.88bn in outstanding short-term debt as of YE 2023.The group's long-term liquidity target is around EUR 8bn-10bn to better protect itself against future crises.

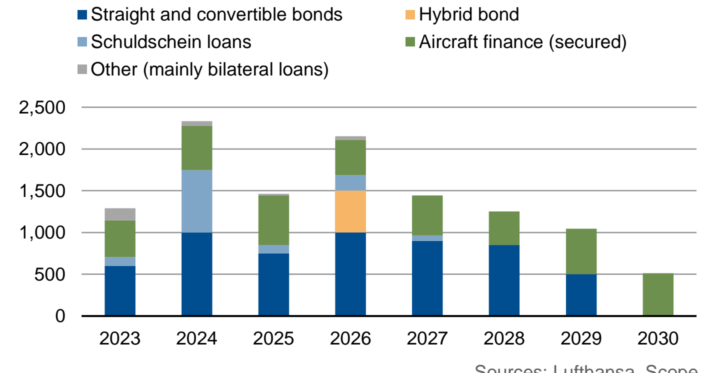
Balance in EUR m	2022	2023E	2024E
Unrestricted cash (t-1)	4,566	8,201	8,478
Open committed credit lines (t-1)	2,100	2,100	2,100
Free operating cash flow	2,275	697	566
Short-term debt (t-1)	1,629	1,881	2,331
Coverage	**>200%**	**>200%**	**>200%**

Figure 3: Key credit metrics



Sources: Lufthansa, Scope (estimates)

Figure 4: Debt maturity schedule as of March 2023 in EUR m



Sources: Lufthansa, Scope

Supplementary rating drivers: no impact

Financial policy continues to be neutral for the rating. Management shows a disciplined strategy as well as a commitment to deleveraging and maintaining the investment grade level. Management's aim is to resume paying dividends in 2024 once stability returns.

Long-term and short-term debt ratings

Senior unsecured debt rating: BBB-

Senior unsecured debt has been rated BBB-, which is in line with the issuer rating.

Subordinated unsecured (hybrid) debt rating: BB

Outstanding subordinated (hybrid) debt remains two notches below the issuer credit rating, at BB. This is due to the features of the hybrid debt placed by the rated entity, primarily its deep contractual subordination (ranking ahead only of ordinary share capital), perpetual tenor and optional deferral (in whole or in part) on every coupon payment date at the discretion of the issuer.

Short-term rating: S-2

The affirmation the S-2 short-term rating is backed by the strong short-term liquidity cover and conservative liquidity management. The rating is further supported by the well-established bank relationships and good standing in the capital markets, evidenced by the revolving credit line established in 2022.

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